



# Digital Europe Programme (DIGITAL)

## Call for proposals

Cloud Data and TEF (DIGITAL-2022-CLOUD-AI-02)

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#### CALL FOR PROPOSALS

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#### **0. Introduction**

This is a call for proposals for EU **action grants** in the field of Cloud, Data and Artificial Intelligence under the **Digital Europe Programme (DIGITAL)**.

The regulatory framework for this EU Funding Programme is set out in:

- Regulation 2018/1046 (EU Financial Regulation)
- the basic act (Digital Europe Regulation 2021/694<sup>1</sup>).

The call is launched in accordance with the 2021/2022 Work Programme<sup>2</sup> and will be managed by the **European Commission**, **Directorate-General for Communication**, **Networks**, **Content and Technology (DG CONNECT)**.

Topics **DIGITAL-2022-CLOUD-AI-02-CANCER-IMAGE, DIGITAL-2022-CLOUD-AI-02-TEF-MANUF, DIGITAL-2022-CLOUD-AI-02-TEF-HEALTH, DIGITAL-2022-CLOUD-AI-02-TEF-AGRIFOOD, DIGITAL-2022-CLOUD-AI-02-TEF-SMART** are EU Synergies calls. Grants can be linked with another grant funded from any other EU funding programme. The grants under both calls will be managed as linked actions

The call covers the following **topics**:

- **DIGITAL-2022-CLOUD-AI-02-CANCER-IMAGE** Federated European infrastructure for cancer images data
- **DIGITAL-2022-CLOUD-AI-02-SEC-LAW** Data space for security and law enforcement
- DIGITAL-2022-CLOUD-AI-02-OPEN-AI Public Sector Open Data for AI
- **DIGITAL-2022-CLOUD-AI-02-TEF-MANUF** Testing and Experimentation Facility for Manufacturing
- **DIGITAL-2022-CLOUD-AI-02-TEF-HEALTH** Testing and Experimentation Facility for Health
- **DIGITAL-2022-CLOUD-AI-02-TEF-AGRIFOOD** Testing and Experimentation Facility for Agri-Food
- **DIGITAL-2022-CLOUD-AI-02-TEF-SMART** Testing and experimentation Facility for smart cities and communities

Each project application under the call must address only one of these topics. Applicants wishing to apply for more than one topic, must submit a separate proposal under each topic.

We invite you to read the **call documentation** carefully, and in particular this Call Document, the Model Grant Agreement, the <u>EU Funding & Tenders Portal Online</u> <u>Manual</u> and the <u>EU Grants AGA — Annotated Grant Agreement</u>.

<sup>&</sup>lt;sup>1</sup> Regulation (EU) 2021/694 of the European Parliament and of the Council of 29 April 2021 establishing the Digital Europe programme (OJ L166, 11.05.2021).

<sup>&</sup>lt;sup>2</sup> Commission Implementing Decision C/2021/7914 of 10.11.2021 concerning the adoption of the work programme for 2021 - 2022 and the financing decision for the implementation of the Digital Europe Programme.

These documents provide clarifications and answers to questions you may have when preparing your application:

- the <u>Call Document</u> outlines the:
  - background, objectives, scope, activities that can be funded and the expected results (sections 1 and 2)
  - timetable and available budget (sections 3 and 4)
  - admissibility and eligibility conditions (including mandatory documents; sections 5 and 6)
  - criteria for financial and operational capacity and exclusion (section 7)
  - evaluation and award procedure (section 8)
  - award criteria (section 9)
  - legal and financial set-up of the Grant Agreements (section 10)
  - how to submit an application (section 11).
- the <u>Online Manual</u> outlines the:
  - procedures to register and submit proposals online via the EU Funding & Tenders Portal ('Portal')
  - recommendations for the preparation of the application.
- the <u>AGA Annotated Grant Agreement</u> contains:
  - detailed annotations on all the provisions in the Grant Agreement you will have to sign in order to obtain the grant (including cost eligibility, payment schedule, accessory obligations, etc).

#### 1. Background

The Specific Objective 2 of the Digital Europe Programme aims to reinforce the EU's core Artificial Intelligence (AI) capacities as a crucial driver for the digital transformation of the public and private sectors. The EU data strategy<sup>3</sup> outlined the importance of building a thriving ecosystem of private actors to generate economic and societal value from data, while preserving high privacy, security, safety and ethical standards. It announced that the Commission will invest in a High Impact Project that will fund infrastructures, data-sharing tools, architectures and governance mechanisms for thriving data-sharing and Artificial Intelligence ecosystems.

To reach these objectives, three main interlinked work strands are foreseen in the first two years of implementation of the Digital Europe Programme:

• The deployment of **cloud-to-edge infrastructure and services** compliant with EU rules, notably on security, data protection and privacy and environmental aspects. Open-source by default, they will ensure fluid data flows. Completing the picture, the deployment of the Testing and Experimentation Facility for edge-AI will support the green transition with support to advanced low-power computing technologies. Such facility should

<sup>&</sup>lt;sup>3</sup> Communication from the Commission, A European strategy for data; COM/2020/66 final

be a role model in showing effective ways to comply with existing legislation, and taking into account relevant codes of conduct and guidelines.

- The deployment of a Data for EU strand with a focus on building common • data spaces, based on the above federated cloud-to-edge infrastructure and services that are accessible to businesses and the public sector across the EU. The objective is the creation of data infrastructure with tailored governance mechanisms that will enable secure and cross-border access to key datasets in the targeted thematic areas. Focus will be on data spaces for Green deal, smart communities, mobility, manufacturing, agriculture, cultural heritage, skills, language technologies, financial sector, public media, health, administrations and tourism. Data spaces will be supported by a Data Space Support Centre in order to guarantee coordination between the various initiatives and guarantee that data could be accessed across different sectors. The centre will ensure the best use of the cloud-to-edge infrastructure and services to serve the needs of these data spaces.
- The deployment of AI reference testing and experimentation facilities with a focus on four prioritized application sectors (i.e. health, smart communities, manufacturing, and agriculture)<sup>4</sup>. These facilities will provide common, highly specialised resources to be shared at European level. In addition, the AI-on-demand platform will be consolidated as a catalogue of AI-based resources and marketplace, for trustworthy AI tools made in Europe for both private and public sector use.

The present call covers supports the deployment of the data ecosystem (second work strand) and AI infrastructures (third work strand).

All topics in this call are subject to the provisions of Article 12(6) of the Digital Europe Programme Regulation. All eligible entities should include in their proposal evidence on how they will address the underlying security issues, including, wherever relevant, measures to avoid falling under foreign jurisdiction obligations, and how they will deal with confidentiality of the information and include evidence of their security expertise. All selected entities implementing such actions shall have the obligation to prevent access by non-eligible third countries or by non-eligible third country entities to classified and non-classified sensitive information.

# 2. Objectives — Scope — Outcomes and deliverables — KPIs to measure outcomes and deliverables — Targeted stakeholders — Type of action — specific topic conditions

### DIGITAL-2022-CLOUD-AI-02-CANCER-IMAGE - Federated European infrastructure for cancer images data

#### <u>Objectives</u>

The aim is to establish and deploy a pan-European digital infrastructure facilitating access to cancer images and related patient data in full compliance with the applicable data protection requirements, building on the work of the relevant H2020 and other research projects. The infrastructure shall be used by clinicians, researchers and innovators with the ultimate aim of more precise and faster clinical decision-making, diagnostics, treatments and predictive medicine that will benefit citizens, patients, healthcare systems and the overall economy.

<sup>&</sup>lt;sup>4</sup> The Commission has worked intensively with Member States to refine to prioritise the four selected sectors (see also the <u>Coordinated Plan on Artificial Intelligence 2021 Review</u>

The resulting infrastructure should be aligned with the developments under the European Health Data space (EHDS). It should be inter-operable with other components of the EHDS. It will be a central element of the European Cancer Imaging Initiative under the Europe's Beating Cancer Plan. It shall contribute to, and establish synergies with, other relevant actions under the Europe's Beating Cancer Plan and the Cancer Mission under Horizon Europe.

The infrastructure should be supported by advanced IT tools and capacities, e.g. AI and HPC, cloud, trust solutions, as appropriate, for enabling secure access to and distributed analysis of datasets. The action may combine existing data sources and support creation of new data sets.

#### <u>Scope</u>

This action will support the deployment of the infrastructure needed to link and explore fragmented European databases of medical images of different types of cancer, with a solid governance and a clear business model for gathering data and its exploitation by public and private organisations in the eligible countries (controllers of data), industry and innovators.

The project shall define a sustainable business model and set up a coordination entity that will supervise the activities, run and maintain the system and its services, ensure the necessary agreements are in place with all relevant stakeholders.

The infrastructure should consist of a governance and coordination entity, a federated network of FAIR-conform data sources, a platform enabling data discovery, querying and capability to access appropriate computing capacities, e.g. for distributed data analysis. It should provide adequate data access control, and secure authorisation and authentication services.

To support the creation of new data sets and the extension of the existing ones, the infrastructure shall provide access to other relevant services and software tools for its targeted users, including data de-identification, data annotation, quality checking for data contributors and data quality management.

The infrastructure should provide the tools and services needed to enhance the engagement and collaboration between different user groups. In particular, collaboration with AI experts or device developers and consultation among clinicians and specialists should be addressed to deploy a fit-for-purpose infrastructure and data that serve user needs.

The infrastructure shall focus on imaging data. It shall enable linking and analysing cancer image data together with the corresponding clinical information. Furthermore, it shall prepare for integrated synoptic analysis of data from associated medical fields such as pathology data, molecular data, laboratory data, vital data, clinical monitoring data and genomic-phenotypic data.

The project is expected to reach out and engage with cancer imaging repositories and stakeholders in all eligible countries, such as the national health systems, entities running screening programmes, etc. in order to increase the representativeness of the cancer imaging data sources for the European population, types of cancers covered, and ensure sufficient size and quality of data for cancer research and innovation.

The project may combine existing data sources and support creation of new cancer image datasets, including synthetic data. It may further extend and adapt (e.g. FAIRification) the existing datasets. It shall address both common (more frequently occurring) and rare cancer types.

The project shall address the needs for annotation of image data for different purposes, including machine learning and validation of AI algorithms. In addition, it shall define European test and training data sets and support their establishment.

To ensure maximum data protection, identifiable data shall in principle be analysed using distributed data analysis and AI learning techniques, while fully taking into account the applicable data protection requirements and the EU's international obligations. Central storage may take place if the data are anonymised and in accordance with applicable legal requirements. The project shall be in full compliance with the relevant regulatory, legal, ethical, quality and interoperability requirements and standards.

The infrastructure comprising different data sources must be based on common data models and interoperability mechanisms. Therefore, the implementation of the data infrastructure should build on the progress achieved in the relevant H2020 and other research projects regarding, for example, the relevant interoperability mechanisms, system architecture, specifications on reference APIs, meta-data, data structure and quality, legal requirements etc.

In terms of interoperability, it should also ensure coherence with the technical specifications for health data exchange set out in the Commission Recommendation on a European Electronic Health Record Exchange format adopted on 6 February 2019, and future EU consensus technical specifications for related health data.

The project should coordinate with other EU-funded projects in the field with a view to establishing interoperability and work towards harmonisation and standardisation, where relevant. It shall establish the necessary links with the relevant European and national initiatives and infrastructures such as European biobank infrastructure BBMRI-ERIC, Euro-Bioimaging Image Archive, hospital-based digital biobanks and cancer registries, etc.

The project is expected to engage with patients, citizens, health professionals and other stakeholders to explain that data is used transparently and responsibly, and raise awareness of the expected benefits for European patients and citizens.

The project selected for the deployment of this infrastructure will have to make provisions for gradually becoming fully compliant with the European Data Spaces Technical Framework. It will also have to coordinate and collaborate with other projects participating in the deployment of the data space and the Data Spaces Support Centre funded under the DIGITAL programme, in order to allow integration of existing standards and to ensure interoperability and portability across infrastructure, applications and data.

Furthermore, the project should establish links with the Testing and Experimentation Facility for Health (TEF) funded under DIGITAL programme. It shall liaise with the TEF to ensure that cancer imaging data can be accessed by the TEF facility users, if required. It shall also liaise with the network of European Digital Innovation Hubs (EDIHs) to ensure that these actors provide support to the cancer imaging ecosystem of innovators such as through awareness raising, etc.

#### Outcomes and deliverables

The following elements shall be delivered by the selected project:

 a sustained governance and a coordination mechanism for the Federated European infrastructure for cancer images data, open to the involvement of new stakeholders;

- deployment of interoperable, FAIR-compliant and secure infrastructure and data governance enabling a sustainable cross-border connection of cancer image data repositories and corresponding clinical information, including a secure authentication system, with links to the relevant European and national infrastructures;
- tools and services for distributed analysis of cancer imaging data and related clinical information;
- a federated AI learning system;
- approaches and tools for clinical validation including for the analysis of cancer imaging data and related clinical information;
- demonstration of the added-value of the infrastructure for clinicians, researchers and innovators as part of the sustainability strategy;
- a business model including an uptake strategy explaining the motivation and incentives for all stakeholders at the different levels (national, European, global) to support the data infrastructure towards its sustainability, including data controllers (hospitals/municipalities, research institutes, patients), data users (clinicians, researchers, policy makers, companies), service providers (e.g. IT industry, medical imaging companies), healthcare systems and public authorities at large;
- new, adapted or extended cancer image data sources (including image annotation);
- anonymised cancer images of different cancer types useful for developing clinically relevant AI algorithms for specific use cases, including test and training data sets ("atlas" of anonymised cancer images);
- a mechanism for required links between the cancer imaging data infrastructure and the Testing and Experimentation Facility for Health;
- a communication strategy and awareness raising activities necessary to ensure the establishment, sustainable operation and successful uptake of the infrastructure;
- financial support to third parties may be proposed, if deemed necessary to achieve the objectives of the action, for one or more of the following purposes: to enable the extension, adaptation and/or connection of further cancer image data sources beyond the project consortium, to train AI algorithms on cancer imaging data available in the infrastructure or to implement awareness raising activities.

#### KPIs to measure outcomes and deliverables

Proposals are expected to set clear and pertinent targets and define measurement methods for all measurable outcomes and deliverables. At least the following KPIs must be defined:

- number of different cancer imaging data repositories/databanks connected to the European cancer imaging data infrastructure – at least 20 from at least 10 different eligible countries by the end of the project;
- volume and number of data points, as well as types of cancer imaging data and corresponding patient information accessible through the European cancer images infrastructure;

- number of users (researchers, healthcare professionals, clinicians, innovators) using the European cancer imaging data infrastructure in operational mode – at least 300 by the end of the project;
- number of deployed AI algorithms, tools or prediction models of outcomes using the data in the infrastructure.

#### Targeted stakeholders

The consortium can include public and private entities such as (but not limited to): public administrations (national, regional and local level), hospitals, medical centres, university clinics, cancer institutes, research institutes, biobanks, research agencies, research infrastructures, not-for-profit organisations, industry, SMEs.

#### Type of action

Simple Grants — 50% funding rate

For more information on Digital Europe types of action, see Annex 1.

#### Specific topic conditions

- For this topic, security restrictions under Article 12(6) of the Digital Europe Regulation apply (see sections 6 and 10 and Annex 2)
- For this topic, multi-beneficiary applications are mandatory and specific conditions for the consortium composition apply (see section 6)
- For this topic, following reimbursement option for equipment costs applies: depreciation and full cost for listed equipment (see section 10)
- For this topic, financial support to third parties is allowed (see section 10)
- The following parts of the award criteria in section 9 are exceptionally NOT applicable for this topic:
  - extent to which the project would reinforce and secure the digital technology supply chain in the Union
  - extent to which the proposal can overcome financial obstacles such as the lack of market finance
  - extent to which the proposal addresses environmental sustainability and the European Green Deal goals, in terms of direct effects and/or in awareness of environmental effects

### DIGITAL-2022-CLOUD-AI-02-SEC-LAW - Data space for security and law enforcement

#### <u>Objectives</u>

The objective is to deploy a common European Security data space for innovation allowing research, development, testing, training and validation of algorithms for AIbased systems for security (law enforcement) based on various types of datasets, including operational pseudonymized and anonymized datasets, following the data minimisation principle (Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 – GDPR and Directive (EU) 2016/680 of the European Parliament and of the Council of 27 April 2016 - LED). Particular attention must be given to reducing potential bias in algorithms to be used by law enforcement.

Technological sovereignty of Member States and the EU in the field of fighting crime and terrorism in the digital age is a fundamental public interest as well as a matter of national security, and can be strengthened by creating high quality and trusted datasets that would enable Member States' Law Enforcement Agencies (LEAs) to develop and validate their own digital tools.

A dedicated common Data space for Security and law enforcement will satisfy both principles set in the "A European strategy for data"<sup>5</sup>: (1) that actions under data spaces for public administrations will also focus on data use for improving law enforcement in the EU in line with EU law, and (2) that data for the public good can serve to ensure more efficient fight against crime.

Namely, this data space would serve the interests of all stakeholders in charge of public or internal security, and in particular, the Member States' law enforcement authorities, authorities in charge of border security as well as the relevant European Agencies, such as Europol, the European Border and Coast Guard Agency, and eu-LISA (in accordance with the legal bases that apply to them). In such a way, the EU open strategic autonomy in the field of AI applications for law enforcement will be enhanced.

The objective of the Data space for Security and law enforcement is solely to facilitate innovation, it should not cover data sharing for investigative purposes.

#### <u>Scope</u>

This action will lay the economic, organisational and technical foundations of a federated data infrastructure. Specifically, it is expected that at the end of the project a system and a model of the data governance will be available, thus the project will include the following tasks:

- to develop a reference architecture, to define data standards and to determine criteria for certifications and product quality while addressing ethical concerns and complying with data protection requirements. Standardisation of data should be proposed and the framework may be defined based upon the UMF (uniform message format) project defining data models in a number of areas, such as data on persons, firearms and vehicles;
- to generate, collect, annotate and make interoperable data suitable to test, train and validate algorithms, which should be available for the training, validation and testing of tools using AI technologies, and, when possible, proportional and where provided for by law, shareable for security research purposes. There should be a monitoring process to ensure the quality of the data and the validation of the results. It would focus in particular the technical standard and the content, i.e. that the data is not biased against ethnicity, gender, nationality or other social categories.
- The projects will have to deploy trust mechanisms (security and privacy by design), data services which ensure the identity of the source and receiver of data and which ensure the access and usage rights towards the data. Projects are encouraged to perform the study and analysis of alternatives for data

<sup>5</sup> COM(2020) 66 final

collection with maximum efficiency in order to provide interoperability within the domain. Through this concept of a federated data infrastructure, we enable European security stakeholders to develop their potential in a dynamic security ecosystem. Projects under this action should pay specific attention to fundamental rights challenges notably by proposing adequate bias mitigation and non-discrimination mechanisms as well as by providing enhanced data quality. They should also demonstrate strict compliance with the EU legal framework on data processing for police purposes as set out in Directive 2016/680 of the European Parliament and the Council of 27 April 2016 and the GDPR. The projects will ensure appropriate coordination with relevant projects funded under the research Framework Programmes and, when applicable, EU Space programmes operating security services (Copernicus, Galileo).

The projects selected for the deployment of this data space will have to make provisions for gradually becoming fully compliant with the European Data Spaces Technical Framework. They will also have to coordinate and collaborate with other projects participating in the deployment of the data space and the Data Spaces Support Centre in order to build on common standards.

#### Outcomes and deliverables

The creation of a common data platform, including the national components and a communication infrastructure, with trusted datasets to train, test and validate algorithms aims to create sufficient quantity of data to research, innovate and develop AI technologies, with the objective to gather and analyse automatically big number of various types of information (pictures, reports, video etc.). The Data space for Security and law enforcement will create a data ecosystem specific for the needs of the security and immigration stakeholders, including national authorities, EU agencies in charge of European security and justice representatives. Private sector representatives may benefit from a dedicated section of the Data space for Security and law enforcement containing anonymous datasets provided that they are carrying out security research under the European Framework Programmes for Research.

A common Data space for Security and law enforcement will substantially foster development of AI technologies, which will constitute a very important contribution to combat crime, enhance border security and facilitate legal migration.

It will also improve the European open strategic autonomy by allowing the national and European law enforcement authorities to develop and validate their own digital tools so to (i) eliminate the threat of malicious interference of third countries/parties; (ii) allow for setting quality standards at EU level and (iii) increase the technological capabilities of Member States LEAs. On this basis, foreign controlled entities participating in the action should only perform specific, clearly defined tasks and should not be involved in the design of the technical architecture or the security components of the product.

The following elements shall be delivered by the selected project:

- Reference architecture for a federated data space, integrating national components (allowing their interconnection with future central components, once these are developed) with the objective of allowing to train, test and validate algorithms.
- Components enabling interoperability between the national data infrastructure and the future central data infrastructure, once the latter is developed (e.g. APIs connecting to national data infrastructure where feasible). Alternatively, in cases where national data infrastructure for internal security does not exist, components facilitating the development of national data infrastructure, and its interoperability at EU level can be developed.

- Micro-services enabling the application of the principle of federated access to data sources and privacy-preserving linkage techniques (e.g. including secure multi-party computation approaches).
- A set of anonymised/pseudonymised, high-quality data sets that can be used for the development (training), testing and evaluation of algorithms of relevance for applications in the domain of internal security and border of management, and а set tools allowing for automated anonymization/pseudonymisation, as well as annotation of data sets relevant for the use cases in the area of internal security and border management. This point shall be addressed in complementarity with other work strands on the European Security Data Space for Innovation, including the calls under the Internal Security Fund Thematic Facility 2021-2022, in order to avoid overlaps and to seek for complementarities.
- Develop a set of best practices, for example focusing on interoperability, data governance, data quality management, as well as identify common standards (including domain-specific semantic standards and interoperability protocols).

#### KPIs to measure outcomes and deliverables

- Number of national components developed across the EU Member States, according to minimal alignment and standards allowing interchangeability and possible combination of training data, through a private cloud.
- Number of national data infrastructures connected.
- Number of micro-services within the platform developed (which should provide proper SaaS, IaaS and PaaS).
- User satisfaction on usefulness and efficiency of the different elements of the cloud (including, for instance, data platform, application programming interfaces (API's), raw data, specific databased and classic data warehouse, separated innovation, testing and training environment, analytics functionalities, etc.).
- Number of best practises to be shared.
- Number of data sets that can be used for training, testing and evaluation of algorithms, which can be made available to other authorities operating in the area of internal security and border management in the EU and associated countries.

#### Targeted stakeholders

Law enforcement authorities from at least 3 Member States. The participation of additional law enforcement authorities from additional EU Member States is encouraged. In addition, private entities, or public and publicly-funded organisations, including research institutes from eligible countries are encouraged to participate.

#### Type of action

Simple Grants – 50% funding rate

For more information on Digital Europe types of action, see Annex 1.

#### Specific topic conditions

 For this topic, security restrictions under Article 12(6) of the Digital Europe Regulation apply (see sections 6 and 10 and Annex 2)

- For this topic, multi-beneficiary applications are mandatory and specific conditions for the consortium composition apply (see section 6)
- For this topic, following reimbursement option for equipment costs applies: depreciation and full cost for listed equipment (see section 10)
- The following parts of the award criteria in section 9 are exceptionally NOT applicable for this topic:
  - extent to which the project would reinforce and secure the digital technology supply chain in the Union
  - extent to which the proposal can overcome financial obstacles such as the lack of market finance
  - extent to which the proposal addresses environmental sustainability and the European Green Deal goals, in terms of direct effects and/or in awareness of environmental effects

#### DIGITAL-2022-CLOUD-AI-02-OPEN-AI - Public Sector Open Data for AI

#### <u>Objectives</u>

The objective is to increase the easy availability, quality and usability of public sector information in compliance with the requirement of the Open Data Directive , in order to boost the re-use and combination of open public data across the EU for the development of information products and services, including AI applications.

#### <u>Scope</u>

Grants will support public administrations at local, regional and national level in increasing semantic, technical and legal interoperability and data portability of the High Value Datasets (HVDs) identified by the forthcoming corresponding implementing act and selected in specific categories indicated in Annex 1 to the Open Data Directive namely: Geospatial, Earth observation and environment, Meteorological, Statistics, Companies and company ownership, Mobility. In addition, the applicable data sharing rules for selected HVDs belonging to Geospatial, Earth observation and environment, Meteorological domains will complement the provisions of the Directive on Infrastructure for Spatial Information in the European Community (INSPIRE) and further support Green Deal related initiatives.

More concretely, proposals must clearly detail how each of the points below will be addressed:

- Datasets generated must be discoverable and available through one or more Member States' open data portals for free;
- Conditions for the publication and re-use of datasets generated by the proposed actions must be machine readable and compatible with open standard licence
- Concrete sets of quality standards (list of attributes, formats, structure, semantics, documentation, terms of use) with a technical specification and required set of data quality attributes must be proposed to ensure cross-border interoperability for each dataset and its wider re-use on the EU level.
- Existing or newly developed Application Programming Interfaces (APIs) must be implemented to give access to datasets addressed by the proposed action.

- Concrete Key Performance Indicators (KPIs) must be proposed in order to evaluate the benefits of the implemented solution(s) for citizens and/or businesses.
- Relevant legal aspects concerning data use, adoption, sharing, etc., whether at European or national level, additional to those related to ensuring GDPR compliance must be addressed, including licensing aspects.

#### Outcomes and deliverables

High Value Datasets held by the public sector will be available via APIs in a machinereadable format for the creation of data products and services and for their use by the participants in the common European data spaces. This will help more companies, in particular SMEs, start-ups, as well as public organisations to use cross-EU data to scale up and offer EU-wide services, benefiting from the size of the EU's digital market. The easy availability of machine-readable data in bulk or via APIs will also greatly facilitate machine learning based on public data, especially in the datademanding areas such as climate change, pollution or weather predictions.

KPIs to measure outcomes and deliverables

- Number of APIs made available to access High Value Datasets
- Number of datasets addressed by the action and whose semantic, technical and legal interoperability and data portability have been improved

#### <u>Targeted stakeholders</u>

Public Administrations addressed by the Open Data Directive as data providers; public and private sector including SMEs, research and academia as data reusers.

#### Type of action

Simple Grants — 50% funding rate

For more information on Digital Europe types of action, see Annex 1.

#### Specific topic conditions

- For this topic, security restrictions under Article 12(6) of the Digital Europe Regulation apply (see sections 6 and 10 and Annex 2)
- For this topic, multi-beneficiary applications are mandatory and specific conditions for the consortium composition apply (see section 6)
- For this topic, following reimbursement option for equipment costs applies: depreciation only (see section 10)
- The following parts of the award criteria in section 9 are exceptionally NOT applicable for this topic:
  - extent to which the project would reinforce and secure the digital technology supply chain in the Union
  - extent to which the proposal can overcome financial obstacles such as the lack of market finance

 extent to which the proposal addresses environmental sustainability and the European Green Deal goals, in terms of direct effects and/or in awareness of environmental effects

#### **DIGITAL-2022-CLOUD-AI-02-TEF-MANUF** - Testing and Experimentation Facility for Manufacturing

The manufacturing sector employs directly more than 30 million people in Europe with an added value of EUR 2076 billion (2019). Artificial Intelligence has been widely deployed in the manufacturing sector, for example in forecasting, product inspection and quality control or predictive maintenance and offers mature technologies as test environment. The recent sanitary crisis has shown the need and importance of resilience and flexibility of manufacturing that can be achieved through latest developments in AI and robotics and the deployment of intelligent and autonomous systems for flexible production.

#### <u>Objectives</u>

The principal objective of this measure is to increase the productivity and innovation capacity of European manufacturing sector, its resilience and global competitiveness through the integration of state-of-the-art AI and robotics technologies in the manufacturing domain.

In particular, the world-class large-scale reference site for testing and experimentation of AI-powered solutions will foster the deployment of trustworthy, transferable and scalable Industrial AI in Europe. A transition towards a more AI-driven manufacturing industry will improve the quality and sustainability of production.

#### <u>Scope</u>

The selected project will develop world-class reference testing and experimentation facilities with a focus on testing and validation of advanced AI-based and AI-powered technologies in real-world scenarios<sup>6</sup> for the manufacturing sector.

#### TEF CONCEPT: OVERVIEW

TEF shall provide the expertise and infrastructure necessary for the design and implementation of AI testing methodologies in real-world environments within technological readiness levels from six to eight.

TEF shall support technology providers in validating in real-world/realistic environments their state-of-the art AI solutions already tested in the lab, in order to assess the suitability of the solutions to meet the needs of the sector.

The TEF will focus mainly on technical aspects (e.g. accuracy, robustness, safety, security and conformity) and the performance expected by the users (e.g. efficiency, ease of use, integration in workflows). The TEFs will address the non-technical aspects only where necessary, such as the business case, compliance with legal and ethical requirements.

<sup>&</sup>lt;sup>6</sup> In this call, "real-world scenario" should be interpreted as very close to real-world conditions.

Within their mission and field of competence, TEF will be expected to facilitate compliance with the upcoming regulatory framework for AI, and they may support standardisation activities.

TEF may also support regulatory sandboxes supervised by regulators where innovative AI solutions may tested by innovators in a controlled environment.

Testing Industrial AI applications for manufacturing use cases in real environments requires significant investment, and the availability of a variety of expertise. Testing and Experimentation Facilities for manufacturing typically build on existing facilities, capitalizing on previous investments. Their unique facilities, expertise, and experience to test and experiment new AI tools, algorithms, etc. are put as a service to third parties, thereby eliminating the need for third parties to invest in such infrastructures themselves, therefore realising economies of scale at European level. The openness to third parties, and the willingness to work closely with them, are essential characteristics of Testing and Experimentation Facilities for manufacturing.

TEF CONCEPT: STRUCTURE AND FUNCTION OF THE NETWORK

The call will fund one large TEF per sector, composed of a network of around 4-6 nodes. If necessary, there is a possibility to include smaller facilities, so-called satellites, that are connected to one or more nodes.<sup>7</sup>

In order to improve uptake of AI-powered technologies in Europe, the network can decide to cover as many areas as relevant without compromising its impact and quality of its offering. There should only be one node per country within the Manufacturing TEF network.

The TEF project should offer a vision and mission translated into objectives and a plan, including long-term financial sustainability. The overall services offered by the TEF should take advantage of the respective strengths and specialisation of the individual nodes, allowing for complementarity and specialisation.

The TEF should ensure strong cooperation between the nodes and ensure economies of scale throughout its network.

The TEF should ensure the trust of the technology providers using its services, such as through the adoption of suitable IPR protection and ownership.

Each TEF project is expected to collaborate with the network of European Digital Innovation Hubs (EDIHs), which will serve as a distribution channel for the innovations tested in the TEFs. TEFs will provide relevant training support to EDIHs.

Different sectorial TEF networks are expected to plan activities to collaborate amongst themselves in relevant common aspects and share best practices.

TEFs may also help in fostering trust and acceptance by the user community and boosting the roll-out of European AI, data and robotics solutions from the lab to the market, through its validation process, increasing the maturity of the tested solutions.

TEF CONCEPT: STRUCTURE AND FUNCTION OF TEF NODES

<sup>&</sup>lt;sup>7</sup> The section "Structure and function of TEF nodes" below explains the terms of nodes and satellites.

Each node will represent a budget of around  $\leq 10,000,000^8$  aiming to achieve a critical mass and expertise that can provide access to added-value services based on real-world testing scenarios.

Nodes will provide access to technology providers both remotely and in person. Satellites may provide access only digitally, but nodes always have to also provide physical access to their facilities.

If a node cannot achieve critical mass, it may include satellites, working as one distributed entity with tightly cooperating components. Such a node with satellites should ensure harmonized and complementary services are provided by its components. The number of satellites should be limited to guarantee critical mass for each of them.

Each node or satellite must show a letter of commitment for the co-funding by a competent public authority from its country, or from private funding.

To comply with state aid under the General Block Exemption Regulation (GBER)<sup>9</sup>, the TEF must draw up a price list (differentiated per country) for the services offered, based on market prices if these exist, and display the available reductions it plans to offer to SMEs. Larger companies must pay the market prices according to the TEF's price list. If not possible due to operational constraints at the proposal stage, the TEF must present a commitment and methodology on how it will draw up such a price list. TEFs must establish a mechanism to guarantee access to technology providers in an open, transparent and non-discriminatory manner.

#### MANUFACTURING TEF: SPECIFIC SCOPE AND FOCUS AREAS

The manufacturing TEF will provide physical and virtual access to real-life manufacturing resources that can be used for testing and experimenting with AI solutions. Examples of such manufacturing resources are model factories that combine different technologies such as additive manufacturing, machine tools, intelligent conveyor systems, automated warehousing, trusted and secured access to data, IoT infrastructure and more, covering multiple industrial processes.

The manufacturing TEF will address the manufacturing sector's needs for Industrial AI, taking into account domain-specific requirements in terms of time criticality, safety, security and effective interaction and collaboration between robots, AI solutions, and humans who are in control, as well as resource efficiency and environmental performance. The TEF site will offer support and best practices in AI solution implementation including: full integration, industrial validation and demonstration up to pilot manufacturing in dedicated assembly lines and production cells. The TEF needs to support testing and experimentation of main AI-related services, which cover areas of machine learning, robotics, planning and scheduling, optimization, self-configuration, computer vision, formal methods, natural language

<sup>&</sup>lt;sup>8</sup> The funding figure for a node is indicative; proposal can deviate if they demonstrate that a different amount per node would maximize the impact of the measure. The figure is for the duration of the project and is the total budget. DIGITAL covers up to 50% of the €10,000,000. The other 5,000,000 has to covered by the eligible country (co-funding).

<sup>&</sup>lt;sup>9</sup> Annex 2 on state aid of the EDIH 2021-22 WP provides more details. Available online: <u>https://ec.europa.eu/newsroom/repository/document/2021-</u> <u>45/C 2021 7911 1 EN annexe acte autonome cp part1 v2 d4yqL3fB7OJrEhLGIXBaC5w0X0 80907</u> <u>.pdf</u>

processing, automated reasoning, game theory, multi-agent systems, complex systems, system verification, bioinformatics and others.

The TEF site will define and establish European test and training data sets in cooperation with manufacturing data spaces. The project is encouraged to collaborate with other relevant Digital Europe Programme projects, in particular the edge AI and other sectorial Testing and Experimentation Facilities, to ensure appropriate synergies.

The scope and resources of the manufacturing TEF will be driven by use cases of significant economic value and will provide adequate coverage of activities allowing the deployment of the latest AI-based technologies in real manufacturing environments. The TEF has to be relevant to all kinds of AI innovators, allowing them to test and demonstrate their new AI solutions and support, as appropriate, standardization, certification and benchmarking. Aspects such as ethics, cybersecurity and data protection are taken into account, where appropriate. The manufacturing TEF may include regulatory sandboxes, i.e. areas where regulation is limited or favorable to testing new products and services.

When required by the use cases, the manufacturing TEF also needs to cater for edge computing. In manufacturing context, this means that AI tools are brought to sensors and devices, i.e. there where data is produced. These AI tools need to deal with manufacturing requirements related to latency, throughput, stream processing, etc. High-performance computing should be also offered where needed.

The manufacturing TEF will address key areas in an agile setup such as the ones listed below:

- Factory-level optimization (flexible production in high-throughput and high variety environments, rapid prototyping); testing and assessment of AI technology for autonomous decision making within the real world, i.e. interaction with and decision for humans and other machines; supporting e.g. to rearrange the manufacturing process dynamically (incl. choice of manufacturing techniques and logistics);
- Collaborative robotics (mobile, intelligent AI-powered robots enabling safe human-robot collaboration, also in teams; also in sectors like textiles, tourism or construction);
- Circular economy: minimize resource consumption, optimize supply chains in uncertain environments, use of substitute material, collection, sorting and treatment of products that have become waste (making available secondary raw materials and maximum extraction of value), reverse logistics, remanufacturing.

Other impactful topics in AI enabled manufacturing can be addressed as well.

#### MANUFACTURING TEF OFFERING

Each node of the network should provide access to technology providers for testing and experimentation of AI hardware and software solutions through the following physical and digital resources and services within its chosen focus:

 Testing processes, methodologies and metrics, established through the involvement of the necessary expertise (sectorial user expertise, AI/integration/IT-support, end-user representatives, regulatory, etc., as appropriate), to ensure representativeness of the requirements and to maximize acceptance, reputation and trust of validation process, expected to become a reference in Europe.

- Professional services support on technical aspects of AI testing: including integration of the solution within the testing scenario/environment, running the testing and validation processes, technology maturity assessment, issuing of a validation report.
- Access to the necessary digital infrastructure, as appropriate: high-powercomputing, labs, cloud computing, connectivity technologies such as 5G, trusted and secured access to sets of (labelled) high quality data, access to sensor networks, and AI toolkit solutions as needed.
- If necessary, support services in other relevant areas such as business, legal and ethical compliance and verification/certification, including for a compliance with requirement from the future regulatory framework for AI.
- Where relevant, support the establishment and operation of regulatory sandboxes may be set up with national authorities.
- Supported activities will also cover validation and demonstration in real application environment, prototyping, pilot manufacturing, standardization, certification, ethics, cybersecurity and data protection where relevant.
- The TEFs should establish relevant links to relevant Digital Europe Programme projects such as other Testing and Experimentation Facilities, AI-on-demand platform, smart middleware, cloud-computing, High-Performance Computing, (European) Digital Innovation Hubs and data-spaces, especially for manufacturing. Facilities are also encouraged to establish links to relevant projects funded by Horizon 2020 or Horizon Europe, whenever feasible and beneficial.
- Where appropriate, nodes should facilitate connection to: regulatory authorities, conformity assessment bodies, digital innovation hubs, scale-up mechanisms, RTO/academia, start-up/company ecosystem, user groups/associations, and the other projects participating in the TEF.

Each node should guarantee involvement of the necessary expertise for the different tasks expected by the project.

The proposal should demonstrate capacity to quickly update and/or where relevant set-up the needed infrastructure(s) and collaboration mechanism to address the requirements set in the scope of the Testing and Experimentation Facility for manufacturing.

Outcomes and deliverables

#### **Outcomes:**

- The Testing and experimentation Facility for manufacturing will be set up and deployed. It will give innovators the possibility to test and validate their new AI solutions in real-life manufacturing environments before deploying their solutions to the market.
- As a result, new AI and data ecosystems, that are compatible with open frameworks that support data sharing, can be used for the improvement of quality and sustainability of the production.

- This will contribute to increased innovation capacity and competitiveness of the European manufacturing sector, improve its agility and resiliency to external shocks.
- Addressing effects of an ageing workforce through the deployment of AI and robotics technologies across the manufacturing domain.
- Furthermore, the testing and validation of AI applications that respect European values can become a focal point for certification.

#### **Contribution to AI innovation:**

- Impactful validation in real and realistic conditions of innovative AI and robotics technologies in manufacturing applications.
- Boosting the competitiveness of the European industry, including SMEs in AI, a technology of high strategic relevance.
- Contributing to boost European IP and products based on European technology.
- World-class experimentation facilities in Europe, offering comprehensive support combining the necessary expertise, meeting the needs of European innovators, including the highest level of trust and security for the technology providers using the TEF services, and the highest quality of the testing and validation to guarantee trust and security in the tested solutions, key for their broad diffusion.
- Contributing to European technology sovereignty and open strategic autonomy in AI, and AI-enabled solutions.

#### Deliverables

The selected project will develop and, if necessary, adapt over time, a long-term plan over 60+ months to 1) upgrade facilities with resources and services, 2) offer and extend the use of facilities to promising future AI and robotics use cases, solutions and providers, and 3) achieve long-term financial sustainability after EU funding stops.

KPIs to measure outcomes and deliverables

#### **Project-specific KPIs**

- Absolute number of available physical and digital resources as well as professional services in the project's catalogue.
- User satisfaction on usefulness and efficiency of the testing and experimentation offered in the facility, as well as and quality and user-friendliness of support provided.
- Number of best practises to be shared.
- Reduction of robotic automation costs and time.

#### User-specific KPIs

• Number of TEF users served throughout period of project, including percentages of SMEs and cross-border participations.

- Numbers of AI and robotics solutions brought to market-readiness (TRL 8), including percentages of solutions certified and number of patents registered.
- Number of SMEs taking up AI/robotics.
- System Integrators new market.
- Number of new businesses based around TEF generated.

#### Policy-related KPIs

- Evolution of the share of the European industry share in the global manufacturing related AI products and services market.
- Quality of work in the manufacturing sector.
- Increase in European robotics market.

#### Targeted stakeholders

The proposal should include partners with demonstrated experience of delivering on the areas mentioned above and provide a broad representation of constituencies relevant to AI, Robotics and digital transformation of manufacturing.

The proposal should demonstrate capacity to reach out to and effectively engage with relevant stakeholders across Europe, including suppliers, customers, labour unions, the financial community, government, local community organizations, environmentalists and employees. To this end, the proposals should explain how the network will include end-users of the technologies and necessary stakeholders to ensure co-creation (in particular to define testing scenarios, protocols and metrics, relevant to their sector).

Moreover, the proposal should be able to credibly deliver on the expected outcomes, covering the relevant expertise on a variety of domains and an appropriate level of resources convincingly allocated to the action.

#### Type of action

Simple Grants — 50% funding rate

For more information on Digital Europe types of action, see Annex 1.

#### Specific topic conditions

- For this topic, security restrictions under Article 12(6) of the Digital Europe Regulation apply (see sections 6 and 10 and Annex 2)
- For this topic, multi-beneficiary applications are mandatory and specific conditions for the consortium composition apply (see section 6)
- For this topic, following reimbursement option for equipment costs applies: depreciation and full cost for listed equipment (see section 10)
- For this topic, first exploitation obligations apply (see section 10)
- The following parts of the award criteria in section 9 are exceptionally NOT applicable for this topic:

- Extent to which the project would reinforce and secure the digital technology supply chain in the EU
- Extent to which the project can overcome financial obstacles such as the lack of market finance

### DIGITAL-2022-CLOUD-AI-02-TEF-HEALTH - Testing and Experimentation Facility for Health

#### <u>Objectives</u>

The awarded project will develop the Testing and Experimentation Facility (TEF) with a focus on full testing and validation of advanced AI-based technologies (e.g. IoT, MedIoT, Active and Assisted Living Technologies) and robotics technologies for health and care in in real-world scenarios. The TEF for Health should aim to foster trust and acceptance by the user community and boost the roll-out of European AI, data and robotics solutions from the lab to the market, through its validation process, increasing the maturity of the tested solutions.

The objectives of the TEF are to accelerate testing by creating common, accessible infrastructures and services, which combine the necessary technical, administrative, medical and ethical procedures and certifications, as appropriate.

By advancing the deployment of AI enabled health and care solutions, personalised medicine and person-centred care, the TEF for Health shall aim to increase the effectiveness, resilience and sustainability of European health and care systems and reduce healthcare delivery inequalities in Europe, while ensuring compliance with relevant legal, ethical, quality and interoperability standards and requirements.

#### <u>Scope</u>

The selected project will develop world-class reference testing and experimentation facilities with a focus on testing and validation of advanced AI-based and AI-powered technologies in real-world scenarios<sup>10</sup> for the healthcare sector.

#### TEF CONCEPT: OVERVIEW

TEF shall provide the expertise and infrastructure necessary for the design and implementation of AI testing methodologies in real-world environments within technological readiness levels from six to eight.

TEF shall support technology providers in validating in real-world environments their state-of-the art AI solutions already tested in the lab, in order to assess the suitability of the solutions to meet the needs of the sector.

The TEF for Health will operate as a multidisciplinary setting having a common collaboration framework. It will provide physical and digital access to large resources and will offer support, clinical expertise, expertise in AI and robotics, data, training and when relevant, access to high-performance computing. It should be close to where health and care services are provided but also cover multiple health and care processes within the realm of testing, innovation and regulation (hospitals, health and

<sup>&</sup>lt;sup>10</sup> In this call, "real-world scenario" should be interpreted as very close to real-world conditions.

care centres, living labs, RTOs, innovation ecosystems – such as incubators, innovation clusters, accelerators, public health or certification agencies, healthcare companies of any sizes, when relevant). The TEF will gather medical and clinical professionals including researchers, patients, technology experts and integrators, industrial developers, innovators and end-users, and they may also support regulatory sandboxes supervised by regulators where innovative AI solutions may be developed and tested by innovators in a controlled environment (e.g. with regard to the Medical Devices Regulation and Health Technology Assessment). TEFs may in particular provide technical expertise and a secured technical/physical environment for the supervised testing and experimentation activities before AI solutions are admitted to the EU market.

The TEF for Health will focus mainly on technical aspects (e.g. accuracy, robustness, safety, security and conformity) and the performance expected by the users (e.g. efficiency, ease of use, integration in workflows). The TEF will address the non-technical aspects only where necessary, such as the business case, compliance with legal and ethical requirements.

Within its mission and field of competence, the TEF for Health will be expected to facilitate compliance with the upcoming regulatory framework for AI, and it may support standardisation activities.

To this purpose, the TEF for Health should cooperate to the extent appropriate with authorities, bodies, groups or laboratories established or accredited pursuant to relevant Union harmonisation legislation, with Union testing facilities designated under Regulation 2019/1020 and with European and national standardisation organisations.

TEF CONCEPT: STRUCTURE AND FUNCTION OF THE NETWORK

The call will fund one large TEF for the Health and Care sector, composed of a network of around 4-6 nodes. If necessary, there is a possibility to include smaller facilities (satellites) that are connected to one or more nodes.<sup>11</sup>

In order to improve uptake of AI-powered technologies in Europe, the network can decide to cover as many areas as relevant without compromising excellence and impact. There should only be one node per country within the Healthcare TEF network.

The TEF should offer a vision and mission translated into objectives and a plan, including long-term financial sustainability. The overall services offered by the TEF should take advantage of the respective strengths and specialisation of the individual nodes, allowing for complementarity and specialisation.

The TEF should ensure strong cooperation between the nodes and ensure economies of scale throughout the network.

The TEF should ensure the trust of technology providers using its services, such as through the adoption of suitable IPR protection and ownership policies.

The TEF is expected to collaborate with the network of EDIHs, which will serve as a distribution channel for the innovations tested within the TEF. The TEF will provide relevant training support to EDIHs.

<sup>&</sup>lt;sup>11</sup> The section "Structure and function of TEF nodes" below explains the terms nodes and satellites in more detail.

Different sectorial TEF networks are expected to plan activities to collaborate amongst themselves in relevant common aspects and share best practices.

#### TEF CONCEPT: STRUCTURE AND FUNCTION OF THE NODES

Each node will represent a budget of around  $\leq 10,000,000^{12}$  aiming to achieve the critical mass and expertise that can provide access to added-value services based on real-world testing scenarios.

If a node cannot achieve critical mass with a single entity, it may include satellites, working as one distributed entity with tightly cooperating components. Such a node with satellites shall provide harmonized and complementary services. The number of satellites should be limited to guarantee critical mass for each of them.

Nodes will provide access to technology providers both /remotely and in person. Satellites may provide access only digitally, but nodes always have to also provide physical access to their facilities.

Each node or satellite must show a letter of commitment for the co-funding by a competent public authority from its country, or from private funding.

To comply with state aid under the General Block Exemption Regulation (GBER)<sup>13</sup>, the TEF must draw up a price list (differentiated per node) for the services offered, based on market prices if these exist, and display the available reductions it plans to offer to SMEs. Larger companies must pay the market prices according to the TEF's price list. If not possible due to operational constraints at the proposal stage, the TEF must present a commitment and methodology on how it will draw up such a price list. TEFs must establish a mechanism to guarantee access to technology providers in an open, transparent and non-discriminatory manner.

#### FOCUS AREAS

The Health TEF should support solutions that are close-to-market and that have already received, or are about to receive, the CE marking to proceed to large scale testing, piloting and deployment operations in different healthcare areas. The TEF should also support market innovation (from lab-to-fab) for further developing and maturing innovative solutions that have already been validated in lab environments with the aim to help accelerate development and achieve conformity assessment (CE marking) through the relevant procedures.

The activities of the TEF for Health should build synergies with existing and future European initiatives related to the Digital Transformation of Health and Care<sup>14</sup>, the European Health Data Space, AI Regulation, Data Governance Act, Europe's Beating Cancer Plan and the EU Care Strategy<sup>15</sup>, when necessary. The project is encouraged to collaborate, as

<sup>&</sup>lt;sup>12</sup> This funding amount for a node is indicative; the proposal may demonstrate that a different amount per node would maximize the impact of the measure. The figure is for the duration of the project and is the total budget. DIGITAL covers up to 50% of the €10,000,000. The other 5,000,000 has to be covered by the relevant country (co-funding).

<sup>&</sup>lt;sup>13</sup> Annex 2 on state aid of the EDIH 2021-22 WP provides more details. Available online: https://ec.europa.eu/newsroom/repository/document/2021-45/C 2021 7911 1 EN annexe acte autonome cp part1 v2 d4ygL3fB7OJrEhLGIXBaC5w0X0 80907 .pdf

<sup>&</sup>lt;sup>14</sup> <u>https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM%3A2018%3A233%3AFIN</u>

<sup>&</sup>lt;sup>15</sup> <u>https://www.europarl.europa.eu/legislative-train/theme-promoting-our-european-way-of-life/file-</u> <u>european-care-strategy</u>

appropriate, with other relevant Digital Europe Programme projects, in particular the edge AI and other sectorial Testing and Experimentation Facilities, European Digital Innovation Hubs, the Health Data Space and the federated European infrastructure for Genomics data to allow appropriate synergies. Activities of the TEF for Health should contribute to the Cancer Imaging Initiative and therefore the project is encouraged to collaborate closely with the Digital Europe Programme funded federated European Infrastructure for Cancer Images data. The project should allow for large-scale in-silico, in vitro, ex-vivo and in vivo testing, when relevant. Links should be made to existing structures, networks, as well as to other Horizon 2020 or Horizon Europe projects and initiatives (e.g. Open Innovation Test Beds), whenever beneficial. The proposal should include potential use-cases and should establish a methodology to develop further use cases as appropriate. The selection of fields of application of the TEF should serve to maximize the impact of the TEF, based on various factors such as the maturity of the technology, the need for such testing facility, the potential scale of uptake, etc. The TEF may conduct an analysis of bottlenecks and drivers of uptake of AI-based solutions by end users, if appropriate in combination with European Digital Innovation Hubs or other mechanisms to involve the right stakeholders. Possible use cases in different fields could be:

- Prevention, diagnostics, treatments and rehabilitation of infectious and noncommunicable diseases, including cancer, dementia, paediatrics and promotion of healthy lifestyles;
- Monitoring the progress of long-term conditions in function of treatment (e.g. diabetes mellitus, neurodegenerative diseases etc.)
- Support to doctors' decision-making, including personalised, predictive and age- and gender-sensitive treatments;
- Detection of tumours from imaging;
- Robotics surgery;
- Robotics assistance and rehabilitation;
- Active and Assisted Living technologies for elderly or disabled persons;
- Logistics, management of flows and process efficiency in hospitals.

#### TEF OFFERING

Each node of the network should provide access to technology providers for testing and experimentation of AI hardware and software solutions through the following physical and digital resources and services within its chosen focus:

- Testing processes, methodologies and metrics, established through the involvement of the necessary expertise (sectorial user expertise, AI/integration/IT-support, end-user representatives, regulatory, or other as appropriate), to ensure representativeness of the requirements and to maximize acceptance, reputation and trust of the validation process, expected to become a reference in Europe.
- Professional services support on technical aspects of AI testing: including integration of the solution within the testing scenario/environment, running the testing and validation processes, technology maturity assessment, issuing a validation report.

- Access to the necessary digital infrastructure and technologies, as appropriate, such as IoT, MedIoT, Active and Assisted Living Technologies, computational models for personalised and preventive healthcare, robotics technologies for health and care, high-performance-computing, labs, cloud computing, connectivity technologies such as 5G, trusted and secured access to sets of (labelled) high quality data, and AI toolkit solutions as needed.
- If necessary, support services in other relevant areas such as business, legal and ethical compliance and verification/certification, including for compliance with requirements from the future regulatory framework for AI.
- Where relevant, support the establishment and operation of regulatory sandboxes set up with national authorities.
- The TEF should establish links to relevant Digital Europe Programme projects such as other TEF, the AI-on-demand platform, Data Spaces especially the European Health Data Space, Cancer Imaging Initiative, Federated European infrastructure for Genomics, cloud-computing, High-Performance Computing, EDIHs. Facilities are also encouraged to establish links to relevant projects funded by Horizon 2020 or Horizon Europe, whenever feasible and beneficial.
- When appropriate, nodes should facilitate connection to: regulatory authorities, conformity assessment bodies, digital innovation hubs, scale-up mechanisms, RTO/academia, start-up/company ecosystem, user groups/associations, and the other projects participating in the TEF, following a principle of one-stop-shop from the lab to the market.

Nodes (and satellites) must guarantee the involvement of the necessary expertise for the different tasks allocated to them within the TEF.

Processes applying to all TEF nodes, in terms logistics, project selection/on-boarding, testing, regulatory sandboxes, compliance with MDR, HTA, GDPR and other regulation, should be harmonized under the principle of the one-stop-shop to ensure a streamlined and recognizable experience to innovators in the field.

The proposal should demonstrate capacity to quickly update and/or where relevant set-up the needed infrastructure(s) and collaboration mechanism to address the requirements set in the scope of the Testing and Experimentation Facility for Health.

#### Outcomes and deliverables

The TEF will foster the integration of state-of-the-art AI and robotics technologies in the healthcare domain. It will boost European healthcare industry and the digital health ecosystem by focusing on the applicability and facilitate the process of AI innovation and compliance with the relevant regulatory environment. The project will contribute to position the EU as a leader in AI, robotics and digital technologies for health and care by promoting the generation of new companies, retaining talent, and creating new jobs.

#### Deliverables

The selected project will develop and, if necessary, adapt over time, a long-term plan over 60+ months to 1) upgrade facilities with resources and services, 2) offer and extend the use of facilities to promising future AI and robotics use cases, solutions and providers, and 3) achieve long-term financial sustainability after EU funding stops

#### **Expected outcomes include:**

- Validation in real-world conditions of innovative AI and robotics technologies in health and care applications
- Efficiency and safety of treatments
- Improved operational and clinical workflows
- Better clinical outcomes
- Enhanced patient experience and empowerment of patients/citizens to manage their health actively
- Enhanced professional experiences, including education and training opportunities
- Acceleration of the adoption of AI and robotics technologies in the healthcare sector
- Improved innovation capacity and competitiveness in the European healthcare sector
- One-stop-shop facility for bringing Health technologies from Lab to Fab, including streamlined process of compliance with Medical Devices Regulation, Health Technologies Assessment, Health Data Exchange format, GDPR, the upcoming AI Act and other relevant regulations, that govern the marketing authorisation of healthcare products
- Stronger European Health-Tech and digital health ecosystem
- Quicker uptake of Health technologies by public and private entities throughout the EU

#### Contribution to AI innovation:

- Boosting the competitiveness of the European industry, including SMEs, in AIbased technologies, including robotics, a technology of high strategic relevance
- Contributing to boost European IP and products based on European technology
- World-class experimentation facilities in Europe, offering comprehensive support combining the necessary expertise, meeting the needs of European innovators, including the highest level of trust and security for the technology providers using the TEF services, and the highest quality of the testing and validation to guarantee trust and security in the tested solutions, key for their broad diffusion
- Contributing to European digital sovereignty and open strategic autonomy in AI and AI-enabled solutions

#### KPIs to measure outcomes and deliverables

• Number of TEF users served throughout the duration of the grant, including percentage of SMEs and cross-border participations

- Number of solutions tested, validated and/or supported by the Health TEF, which have at least started the CE marking procedure, or have been adopted by public or private health and care providers and/or brought to the market
- Added value for end-users of the solutions/technologies validated in the TEF, such as patients, doctors, nurses, hospitals and, where appropriate, other players in the health and care value chains, e.g. in terms of lower costs, and/or higher resource efficiency, increased sustainability

#### Targeted stakeholders

The proposal should include partners with demonstrated experience of delivering on the areas mentioned above and provide a broad representation of constituencies relevant to AI, Robotics and the digital transformation of health and care.

The proposal should demonstrate capacity to reach out to and effectively engage with relevant stakeholders across Europe. To this end, the proposals should explain how the network will include end-users of the technologies and necessary stakeholders to ensure co-creation (in particular to define testing scenarios, protocols and metrics, relevant to the sector).

Moreover, the proposal should be able to credibly deliver on the expected outcomes, covering the relevant expertise on a variety of domains and an appropriate level of resources convincingly allocated to the action.

#### Type of action

Simple Grants — 50% funding rate

For more information on Digital Europe types of action, see Annex 1.

#### Specific topic conditions

- For this topic, security restrictions under Article 12(6) of the Digital Europe Regulation apply (see sections 6 and 10 and Annex 2)
- For this topic, multi-beneficiary applications are mandatory and specific conditions for the consortium composition apply (see section 6)
- For this topic, following reimbursement option for equipment costs applies: depreciation and full cost for listed equipment (see section 10)
- For this topic, first exploitation obligations apply (see section 10)
- The following parts of the award criteria in section 9 are exceptionally NOT applicable for this topic:
  - Extent to which the project would reinforce and secure the digital technology supply chain in the EU
  - Extent to which the project can overcome financial obstacles such as the lack of market finance
  - Extent to which the proposal addresses environmental sustainability and the European Green Deal goals, in terms of direct effects and/or in awareness of environmental effects\*

#### DIGITAL-2022-CLOUD-AI-02-TEF-AGRIFOOD - Testing and Experimentation Facility for Agri-Food

The TEF for the agri-food sector will seek to bring AI and AI-powered robotics technology from the lab to the market, as described in the European Commission's Communication Coordinated Plan on AI.<sup>16</sup> It is also in line with the declaration "a smart and sustainable digital future for European agriculture and rural areas", signed on 9th of April 2019.

#### <u>Objectives</u>

The principal objective of this measure is to further the development of AI and AIpowered robotics technologies in order to serve the agri-food sector by enabling the full benefit of the digital transformation and the move to a Circular Economy for a more sustainable, affordable, efficient and competitive production under high standards.

In particular, the Testing and Experimentation Facilities (TEF) will seek to maximise the uptake of AI-powered solutions in agri-food to maximise the impact on the agrifood's competitiveness and its main players.

#### <u>Scope</u>

The selected project will develop world-class reference testing and experimentation facilities with a focus on testing and validation of advanced AI-based and AI-powered robotics technologies in real-world scenarios<sup>17</sup> for the agrifood sector.

#### TEF CONCEPT: OVERVIEW

TEF shall provide the expertise and infrastructure necessary for the design and implementation of AI testing methodologies in real-world environments within technological readiness levels from six to eight.

TEF shall support technology providers in validating in real-world environments their state-of-the art AI solutions already tested in the lab, in order to assess the suitability of the solutions to meet the needs of the sector.

The TEF for agri-food will focus mainly on technical aspects (e.g. accuracy, robustness, safety, security and conformity) and the performance expected by the users (e.g. efficiency, ease of use, integration in workflows). The TEF will address the non-technical aspects only where necessary, such as business case, compliance with legal and ethical requirements.

Within its respective mission and field of competence, TEF will be expected to facilitate compliance with the upcoming regulatory framework for AI, and they may support standardisation activities.

TEF for agri-food may also support regulatory sandboxes supervised by regulators where innovative AI solutions may tested by innovators in a controlled environment.

<sup>&</sup>lt;sup>16</sup> COM(2018) 795 final; COM(2021) 205 final

<sup>&</sup>lt;sup>17</sup> In this call, "real-world scenario" should be interpreted as very close to real-world conditions.

TEFs may also help in fostering trust and acceptance by the user community and boosting the roll-out of European AI, data and robotics solutions from the lab to the market, through its validation process, increasing the maturity of the tested solutions.

#### TEF CONCEPT: STRUCTURE AND FUNCTION OF THE NETWORK

The call will fund one large TEF for agri-food, composed of a network of around 4-6 nodes. If necessary, there is a possibility to include smaller facilities, so-called satellites, that are connected to one or more nodes.<sup>18</sup>

In order to improve uptake of AI-powered technologies in Europe, the network can decide to cover as many areas as relevant without compromising its impact and quality of its offering. There should only be one node per country within the Agri-Food TEF network.

The TEF project should offer a vision and mission translated into objectives and a plan, including long-term financial sustainability. The overall services offered by the TEF should take advantage of the respective strengths and specialisation of the individual nodes, allowing for complementarity and specialisation.

The TEF should ensure strong cooperation between the nodes and ensure economies of scale throughout its network.

The TEF should ensure the trust of technology providers using its services, such as through the adoption of suitable IPR protection and ownership policies.

Different sectorial TEF networks are expected to plan activities to collaborate amongst themselves in relevant common aspects and share best practices.

#### TEF CONCEPT: STRUCTURE AND FUNCTION OF NODES

Each node will represent a budget of around €10,000,000<sup>19</sup> aiming to achieve a critical mass and expertise that can provide access to added-value services based on real-world testing scenarios.

If a node cannot achieve critical mass with a single entity, it may include satellites, working as one distributed entity with tightly cooperating components. Such a node with satellites should ensure harmonized and complementary services provided by its components. The number of satellites should be limited to guarantee critical mass for each of them.

Nodes will provide access to technology providers both remotely and in person. Satellites may provide access only digitally, but nodes always have to also provide physical access to their facilities.

Each TEF project is expected to collaborate with the network of European Digital Innovation Hubs (EDIHs), which will serve as a distribution channel for the innovations tested in the TEFs. TEFs will provide relevant training support to EDIHs.

<sup>&</sup>lt;sup>18</sup> The section "Structure and function of TEF nodes" below explains the terms of nodes and satellites.

<sup>&</sup>lt;sup>19</sup> The funding figure for a node is indicative; proposal can deviate if they demonstrate that a different amount per node would maximize the impact of the measure. The figure is for the duration of the project and is the total budget. DIGITAL covers up to 50% of the €10,000,000. The other 5,000,000 has to covered by the eligible country (co-funding).

Each node or satellite must show a letter of commitment for the co-funding by a competent public authority from its country, or from private funding.

To comply with state aid under the General Block Exemption Regulation (GBER),<sup>20</sup> the TEF must draw up a price list (differentiated per country) for the services offered, based on market prices if these exist, and display the available reductions it plans to offer to SMEs. Larger companies must pay the market prices according to the TEF's price list. If not possible due to operational constraints at the proposal stage, the TEF must present a commitment and methodology on how it will draw up such a price list. TEFs must establish a mechanism to guarantee access to technology providers in an open, transparent and non-discriminatory manner.

#### Focus areas

Fields of applications of the Agri-Food TEF network should be selected to optimize the impact of the TEF, based various factors such as the maturity of the technology, the need for such testing facility, the potential scale of uptake, etc. They may include, for instance, precision farming solutions, but also other applications from midand down-stream such as food processing, wholesale, retail, catering and food services. The project should cover agriculture as a minimum, but may also cover the whole value chain of the agri-food sector. Where appropriate testing and validation be done in connection with a specialised demonstration facility, several subcan sector and production types can be considered as well as various variables as it crop-livestock types/soils/climatic and environmental conditions/farm regards structure. The facilities may include a range of use cases in different fields such as but not limited to - precision weeding/fertilisation/seeding, sensor data management, multifunctional autonomous robotics applications (and its long-time continuous use). and/or in different sub-sectors, such as arable farming, greenhouses, livestock/chicken management. Use cases may also be developed along different topics, such as collaborative robotics, circular economy or reduced food loss/waste. The project should include potential use-cases and methodology to develop further ones as appropriate. The use-cases offered should be end-user driven. This will be ensured by closely involving the end-users, e.g. farmers. Smaller farms<sup>21</sup> and businesses should be involved in particular to ensure affordability of AI solutions.

#### TEF offering

Each node of the network should provide access to technology providers for testing and experimentation of AI hardware and software solutions through the following physical and digital resources and services within its chosen focus:

• Testing processes, methodologies and metrics, established through the involvement of the necessary expertise (sectorial user expertise, AI/integration/IT-support, end-user representatives, regulatory, etc., as appropriate), to ensure representativity of the requirements and to maximize acceptance, reputation and trust of validation process, expected to become a reference in Europe.

Annex 2 on state aid of the EDIH 2021-22 WP provides more details. Available online: <u>https://ec.europa.eu/newsroom/repository/document/2021-</u> <u>45/C 2021 7911 1 EN annexe acte autonome cp part1 v2 d4ygL3fB7OJrEhLGIXBaC5w0X0 80907</u> <u>.pdf</u>

<sup>&</sup>lt;sup>21</sup> Small both in physical and economical size.

- Professional services support on technical aspects of AI testing: including integration of the solution within the testing scenario/environment, running the testing and validation processes, technology maturity assessment, issuing of a validation report.
- Access to the necessary digital infrastructure, as appropriate: High-powercomputing, labs, cloud computing, connectivity technologies such as 5G, trusted and secured access to sets of (labelled) high quality data, access to sensor networks, and AI toolkit solutions as needed.
- If necessary, support services in other relevant areas such as business, legal and ethical compliance and verification/certification, including for a compliance with requirement from the future regulatory framework for AI.
- Where relevant, support the establishment and operation of regulatory sandboxes may be set up with national authorities.
- The TEFs should establish relevant links to relevant Digital Europe Programme projects such as other Testing and Experimentation Facilities, AI-on-demand platform, smart middleware, cloud-computing, High-Performance Computing, EDIHs and data-spaces, especially for agriculture. Facilities are also encouraged to establish links to relevant projects funded by Horizon 2020 or Horizon Europe, whenever feasible and beneficial.
- Where appropriate, nodes should facilitate connection to: regulatory authorities, conformity assessment bodies, digital innovation hubs, scale-up mechanisms, RTO/academia, start-up/company ecosystem, user groups/associations, and the other projects participating in the TEF, following a principle of one-stop-shop from the lab to the market.

Nodes (and satellites) must guarantee the involvement of the necessary expertise for the different tasks allocated to them within the TEF.

The proposal should demonstrate capacity to quickly update and/or where relevant set-up the needed infrastructure(s) and collaboration mechanism to address the requirements set in the scope of the Testing and Experimentation Facility for Agri-Food.

#### Outcomes and deliverables

In terms of technological solutions, expected outcomes include reaching longer term robotics autonomy levels at a faster pace, accelerating the adoption of AI-based solutions in agriculture, increasing awareness of new digital farming technologies, validation in real conditions of next-generation AI-powered agricultural robotics and AI-based decision-making tools and enabling large-scale data collections. The AI solutions developed should also aim to be tailored to the needs of and affordable for smaller farms.<sup>22</sup>

In terms of the agri-food innovation ecosystem, expected outcomes include:

- Innovation capacity and competitiveness improvement in the European Agri-Food sector
- Stronger European agri-Food-Tech and digital agri-food ecosystem

<sup>&</sup>lt;sup>22</sup> Small refers to the economical and physical size of farms.

- Network of nodes, and were applicable satellites, following the principle of onestop-facilities for bringing AI-based technologies for Agri-Food from Lab to Fab

In terms of the agri-food sector, expected impact would in the longer term include increased agri-food sector resilience, mitigation of the environmental impact of agricultural activity to soil, water and biodiversity, greater resource and cost efficiency and competitiveness in agricultural production, helping to optimise the use of natural resources for instance through supporting a decrease in input and the impact of the use of e.g. water, fertilizer or pesticides to the environment. Depending on the final scope of the project, it may contribute to climate mitigation and adaptation of the sector as well as to increased food and nutrition security and/ or optimised application of the approaches of the circular economy.

#### Deliverables

The selected project will develop and, if necessary, adapt over time, a long-term plan over 60+ months to 1) upgrade facilities with resources and services, 2) offer and extend the use of facilities to promising future AI and robotics use cases, solutions and providers, and 3) achieve long-term financial sustainability after EU funding stops

#### Expected outcome in terms of AI innovation:

- Impactful validation in real and realistic conditions of innovative AI and robotics technologies in agri-food applications,
- Boosting the competitiveness of the European industry, including SMEs in AIbased technologies, including robotics, a technology of high strategic relevance;
- Contributing to boost European IP and products based on European technology;
- World-class experimentation facilities in Europe, offering comprehensive support combining the necessary expertise, meeting the needs of European innovators, including the highest level of trust and security for the technology providers using the TEF services, and the highest quality of the testing and validation to guarantee trust and security in the tested solutions, key for their broad diffusion;
- Contributing to European technology sovereignty and open strategic autonomy in AI, and AI-enabled solutions;

KPIs to measure outcomes and deliverables

Project-specific KPIs

- Absolute number of available physical and digital resources as well as professional services in the project's catalogue.
- User satisfaction on usefulness and efficiency of the testing and experimentation offered in the facility, as well as and quality and user-friendliness of support provided.).

User-specific KPIs

- Number of TEF users served throughout period of project, including percentages of SMEs and cross-border participations.
- Numbers of AI and robotics solutions brought to market-readiness (TRL 8), including percentages of solutions certified and number of patents registered.

Policy-related KPIs

• Evolution of the share of the European industry in the global agri-food related AI products and services market.

#### Targeted stakeholders

The proposal should include partners with demonstrated experience of delivering on the areas mentioned above and provide a broad representation of constituencies relevant to AI, Robotics and the digital transformation of agri-food.

The proposal should demonstrate capacity to reach out to and effectively engage with relevant stakeholders across Europe. To this end, the proposals should explain how the network will include end-users of the technologies and necessary stakeholders to ensure co-creation (in particular to define testing scenarios, protocols and metrics, relevant to their sector).

Moreover, the proposal should be able to credibly deliver on the expected outcomes, covering the relevant expertise on a variety of domains and an appropriate level of resources convincingly allocated to the action.

#### Type of action

Simple Grants — 50% funding rate

For more information on Digital Europe types of action, see Annex 1.

#### Specific topic conditions

- For this topic, security restrictions under Article 12(6) of the Digital Europe Regulation apply (see sections 6 and 10 and Annex 2)
- For this topic, multi-beneficiary applications are mandatory and specific conditions for the consortium composition apply (see section 6)
- For this topic, following reimbursement option for equipment costs applies: depreciation and full cost for listed equipment (see section 10)
- For this topic, first exploitation obligations apply (see section 10)
- The following parts of the award criteria in section 9 are exceptionally NOT applicable for this topic:
  - Extent to which the project would reinforce and secure the digital technology supply chain in the EU
  - Extent to which the project can overcome financial obstacles such as the lack of market finance

#### **DIGITAL-2022-CLOUD-AI-02-TEF-SMART** - Testing and experimentation Facility for smart cities and communities

#### <u>Objectives</u>

The main objective of this measure is to provide a testing and experimentation facility for AI and robotics in cities and communities and make their resources accessible to EU cities, communities and innovative industry stakeholders (including SMEs) that would enable them to validate novel AI-driven services in close-to-real-life environments before their further massive deployment.

The Testing and Experimentation Facility will actively collaborate with the project validating the blueprint for a common European data space for smart cities and communities by making any infrastructure created by the pilots funded under that initiative widely accessible on a longer-term basis to other stakeholders in line with the Testing and Experimentation Facility context.

In particular, the Testing and Experimentation Facilities (TEF) will seek to maximise the uptake of AI-powered solutions in smart cities and communities and to maximise the impact on the smart cities and communities' services and competitiveness and maximize the impact on AI innovators.

#### <u>Scope</u>

The selected project will develop world-class reference testing and experimentation facilities with a focus on testing and validation of advanced AI-based and AI-powered robotics technologies in real-world scenarios<sup>23</sup> for smart cities and communities sector.

#### TEF CONCEPT: OVERVIEW

TEF shall provide the expertise and infrastructure necessary for the design and implementation of AI testing methodologies in real-world environments within technological readiness levels from six to eight.

TEF shall support technology providers in validating in real-world environments their state-of-the art AI solutions already tested in the lab, in order to assess the suitability of the solutions to meet the needs of the sector.

The TEFs will focus mainly on the technical aspects (e.g. accuracy, robustness, safety, security and conformity) and the performance expected by the users (e.g. efficiency, ease of use, integration in workflows). The TEF will address the non-technical aspects only where necessary, such as the business case, compliance with legal and ethical requirements.

Within its respective mission and fields of competence, TEF will be expected to facilitate compliance with the upcoming regulatory framework for AI, and they may support standardisation activities.

TEFs may also support regulatory sandboxes supervised by regulators where innovative AI solutions may tested by innovators in a controlled environment.

<sup>&</sup>lt;sup>23</sup> In this call, "real-world scenario" should be interpreted as very close to real-world conditions.

TEFs may also help in fostering trust and acceptance by the user community and boosting the roll-out of European AI, data and robotics solutions from the lab to the market, through its validation process, increasing the maturity of the tested solutions.

#### TEF CONCEPT: STRUCTURE AND FUNCTION OF THE NETWORK

The call will fund one large TEF project per sector, composed of a network of at least 3 nodes. If necessary, there is a possibility to include smaller facilities, so-called satellites, that are connected to one or more nodes.<sup>24</sup>

In order to improve uptake of AI-powered technologies in Europe, the network can decide to cover as many areas as relevant without compromising its impact and quality of its offering. There should only be one node per country within the Smart cities and communities TEF network.

The TEF project should offer a vision and mission translated into objectives and a plan, including long-term financial sustainability. The overall services offered by the TEF should take advantage of the respective strengths and specialisation of the individual nodes, allowing for complementarity and specialisation.

The TEF should ensure strong cooperation the nodes and ensure economies of scale throughout its network.

The TEF should ensure the trust of technology providers using its services, such as through the adoption of suitable IPR protection and ownership policies. In the case of private co-funding, the TEF may provide additional measures to ensure the trust of TEF users.

Each TEF project is expected to collaborate with the network of European Digital Innovation Hubs (EDIHs), which will serve as a distribution channel for the innovations tested in the TEFs. TEFs will provide relevant training support to EDIHs.

Different sectorial TEF networks are expected to plan activities to collaborate amongst themselves in relevant common aspects and share best practices.

#### TEF CONCEPT: STRUCTURE AND FUNCTION OF THE NODES

Each node will represent a budget of around  $\leq 10,000,000^{25}$  aiming to achieve critical mass and expertise that can provide access to added-value services based on real-world testing scenarios.

Nodes will provide access to technology providers both remotely and in person. Satellites may provide access only digitally, but nodes always have to also provide physical access to their facilities.

<sup>&</sup>lt;sup>24</sup> The section "Structure and function of TEF nodes" below explains the terms of nodes and satellites.

<sup>&</sup>lt;sup>25</sup> The funding figure for a node is indicative; proposal can deviate if they demonstrate that a different amount per node would maximize the impact of the measure. The figure is for the duration of the project and is the total budget. DIGITAL covers up to 50% of the €10,000,000. The other 5,000,000 has to covered by the eligible country (co-funding).

If a node cannot achieve critical mass with a single entity, it may include satellites, working as one distributed entity with tightly cooperating components. Such a node with satellites should ensure harmonized and complementary services provided by its components. The number of satellites should be limited to guarantee critical mass for each of them.

Each node or satellite must show a letter of commitment for the co-funding by a competent public authority from its country, or from private funding.

To comply with state aid under the General Block Exemption Regulation (GBER)<sup>26</sup>, the TEF must draw up a price list (differentiated per country) for the services offered, based on market prices if these exist, and display the available reductions it plans to offer to SMEs. Larger companies must pay the market prices according to the TEF's price list. If not possible due to operational constraints at the proposal stage, the TEF must present a commitment and methodology on how it will draw up such a price list. TEFs must establish a mechanism to guarantee access to technology providers in an open, transparent and non-discriminatory manner.

#### Focus areas

Within the context of smart cities and communities, this facility will be focused on use-cases related to impactful use-cases such as transport, energy, construction and environmental protection sectors linked to the action areas of the European Green Deal, and support cross-sector services and applications. The TEF could be used for instance for testing and validation of AI-based automation and robotisation of physical and administrative processes (such as automated city transport, automated waste collection, inspection and maintenance of infrastructures, etc.), decision-support and decision-making tools; certification of products (e.g. for compliance to the MIMPlus specifications), solutions and services; as well as to advance through experimentation and sandboxing the EU regulatory framework for AI and robotics.

The TEF will offer digital twins of some of the use-case environments, exploiting to the extent possible the LDT (local digital twin) toolbox and, vice versa, contributing to the LDT toolbox, to the extent possible.

The project is encouraged to collaborate with other relevant Digital Europe Programme projects, in particular the edge AI and other sectorial Testing and Experimentation Facilities, to ensure appropriate synergies.

The project should include potential use-cases the TEF will propose for testing and methodology to develop further ones as appropriate.

#### TEF offering

As described in the Coordinated Plan on Artificial Intelligence<sup>27</sup> and in the White Paper on Artificial Intelligence<sup>28</sup>, technology infrastructure is needed to ensure specific

<sup>&</sup>lt;sup>26</sup> Annex 2 on state aid of the EDIH 2021-22 WP provides more details. Available online: <u>https://ec.europa.eu/newsroom/repository/document/2021-</u> <u>45/C 2021 7911 1 EN annexe acte autonome cp part1 v2 d4yqL3fB7OJrEhLGIXBaC5w0X0 80907</u> <u>.pdf</u>

<sup>&</sup>lt;sup>27</sup> COM(2018) 795 final

expertise and experience of testing mature technology in the smart cities and communities sector, under real or close to real conditions. The Testing and Experimentation Facility may combine European, national and private investments. The participating communities and cities will create and make physical and digital facilities for testing and experimentation of innovative AI-enabled and robotics-based services and solutions (such as optimisation of traffic flows) widely accessible on a longer-term basis to other stakeholders (and particularly the consortium running the validation pilots funded in this programme under other activities related to smart cities and communities) in close-to-real-life environment.

The facility will offer both the infrastructure and personnel support to the users of the facility to run the tests and experiments, including access to high performance computing.

Smart cities and communities TEF should also offer:

- Testing processes, methodologies and metrics, established through the involvement of the necessary expertise (sectorial user expertise, AI/integration/IT-support, end-user representatives, regulatory, etc, as appropriate), to ensure representativeness of the requirements and to maximize acceptance, reputation and trust of validation process, expected to become a reference in Europe.
- Professional services support on technical aspects of AI testing: including integration of the solution within the testing scenario/environment, running the testing and validation processes, technology maturity assessment, issuing of a validation report.
- Access to the necessary digital infrastructure, as appropriate: high-powercomputing, labs, cloud computing, connectivity technologies such as 5G, trusted and secured access to sets of (labelled) high quality data, access to sensor networks, and AI toolkit solutions as needed.
- If necessary, support services in other relevant areas such as business, legal and ethical compliance and verification/certification, including for compliance with requirement from the future regulatory framework for AI.
- Where relevant, support the establishment and operation of regulatory sandboxes may be set up with national authorities.
- Supported activities will also cover validation and demonstration in real application environment, prototyping, pilot manufacturing, standardization, certification, ethics, cybersecurity and data protection where relevant.
- The TEFs should establish relevant links to relevant Digital Europe Programme projects such as other Testing and Experimentation Facilities, AI-on-demand platform, smart middleware, cloud-computing, High-Performance Computing, EDIHs and data-spaces, especially for manufacturing. Facilities are also encouraged to establish links to relevant projects funded by Horizon 2020 or Horizon Europe, whenever feasible and beneficial.
- Where appropriate, nodes should facilitate connection to: regulatory authorities, conformity assessment bodies, digital innovation hubs, scale-up

<sup>&</sup>lt;sup>28</sup> COM(2020) 65 final

mechanisms, RTO/academia, start-up/company ecosystem, user groups/associations, and the other projects participating in the TEF.

Each node should guarantee involvement of the necessary expertise for the different tasks expected by the project.

The proposal should demonstrate capacity to quickly update and/or where relevant set-up the needed infrastructure(s) and collaboration mechanism to address the requirements set in the scope of the Testing and Experimentation Facility for smart cities and communities.

Outcomes and deliverables

The Testing and Experimentation Facility for smart cities and communities is part of the strategy to bring technology from the lab to the market. The action should mobilise the necessary actors of the ecosystem, to ensure the readiness of both the supply and demand sides in the area of AI-enabled services and deliver the main elements needed to scale up the adoption of AI-based services by EU smart cities and communities. The action will result in one facility to be deployed for an extended period of time to be used in pilots, testing, experimentation, as well as for sandboxing and to support standardisation and the implementation of the AI regulatory framework<sup>29</sup>, where appropriate.

In terms of smart cities and communities innovation ecosystem, expected outcomes include:

- Innovation capacity and competitiveness improvement of Smart cities and communities in Europe
- Stronger Tech and digital smart cities and communities ecosystem
- Network of nodes, and were applicable satellites, for bringing AI-based technologies for smart cities and communities from Lab to Fab

Expected outcomes include increased and faster integration of various AI and robotics systems in smart cities and communities, which will contribute to environmental goals such as carbon neutrality, increased robustness, security, and agility of smart community infrastructure, further increases in efficiency, as well as increased competitiveness of service providers in these communities.

Technological benefits will include validation in real conditions of next-generation AIpowered robotics and AI-based automation, decision-support and decision-making tools, benefitting from large-scale data access, sharing and integration, bringing them to a higher technology readiness level, as well as increased competitiveness of European developers of AI solutions, in particular SMEs, through the support provided by the TEF, to bring their products to market.

#### Deliverables

The selected project will develop and, if necessary, adapt over time, a long-term plan over 60+ months to 1) upgrade facilities with resources and services, 2) offer and extend the use of facilities to promising future AI and robotics use cases, solutions and providers, and 3) achieve long-term financial sustainability after EU funding stops

<sup>&</sup>lt;sup>29</sup> COM(2021) 206 final

Contribution to AI innovation:

- Impactful validation in real and realistic conditions of innovative AI and robotics technologies in smart cities and communities applications.
- Boosting the competitiveness of the European industry, including SMEs in AIbased technologies, including robotics, a technology of high strategic relevance;
- Contributing to boost European IP and products based on European technology;
- World-class experimentation facilities in Europe, offering comprehensive support combining the necessary expertise, meeting the needs of European innovators, including the highest level of trust and security for the technology providers using the TEF services, and the highest quality of the testing and validation to guarantee trust and security in the tested solutions, key for their broad diffusion;
- Contributing to European technology sovereignty and open strategic autonomy in AI, and AI-enabled solutions;
- Contributing to the implementation of the New European Bauhaus<sup>30</sup> initiative

KPIs to measure outcomes and deliverables

Project-specific KPIs

- Absolute number of available physical and digital resources as well as professional services in the project's catalogue.
- User satisfaction on usefulness and efficiency of the testing and experimentation offered in the facility, as well as and quality and user-friendliness of support provided. Number of best practices to be shared.
- Reduction of robotic automation costs and time.

User-specific KPIs

- Number of TEF users served throughout period of project, including percentages of SMEs and cross-border participations.
- Numbers of AI and robotics solutions brought to market-readiness (TRL 8), including percentages of solutions certified and number of patents registered.
- Number of SMEs taking up AI/robotics.
- System Integrators new market.
- Number of new businesses based around TEF generated.

Policy-related KPIs

<sup>&</sup>lt;sup>30</sup> <u>https://europa.eu/new-european-bauhaus/index\_en</u>.

• Evolution of the share of the European industry in the global market of smart cities and communities related AI products and services.

#### Targeted stakeholders

The proposal should include partners with demonstrated experience of delivering on the areas mentioned above and provide a broad representation of constituencies relevant to AI, Robotics and the digital transformation of smart cities and communities.

The proposal should demonstrate capacity to reach out to and effectively engage with relevant stakeholders across Europe, including suppliers, customers, labour unions, the financial community, government, local community organizations, environmentalists and employees. To this end, the proposals should explain how the network will include end-users of the technologies and necessary stakeholders to ensure co-creation (in particular to define testing scenarios, protocols and metrics, relevant to their sectors).

Moreover, the proposal should be able to credibly deliver on the expected outcomes, covering the relevant expertise on a variety of domains and an appropriate level of resources convincingly allocated to the action.

#### Type of action

Simple Grants — 50% funding rate

For more information on Digital Europe types of action, see Annex 1.

#### Specific topic conditions

- For this topic, security restrictions under Article 12(6) of the Digital Europe Regulation apply (see sections 6 and 10 and Annex 2)
- For this topic, multi-beneficiary applications are mandatory and specific conditions for the consortium composition apply (see section 6)
- For this topic, following reimbursement option for equipment costs applies: depreciation and full cost for listed equipment (see section 10)
- For this topic, first exploitation obligations apply (see section 10)
- The following parts of the award criteria in section 9 are exceptionally NOT applicable for this topic:
  - Extent to which the project would reinforce and secure the digital technology supply chain in the EU
  - Extent to which the project can overcome financial obstacles such as the lack of market finance

#### 3. Available budget

The available call budget is **EUR 156 000 000**. This budget might be increased by maximum 20%.

Specific budget information per topic can be found in the table below.

Торіс	Topic budget	
DIGITAL-2022-CLOUD-AI- 02-CANCER-IMAGE	EUR 18.000.000,00	
DIGITAL-2022-CLOUD-AI- 02-SEC-LAW	EUR 8.000.000,00	
DIGITAL-2022-CLOUD-AI- 02-OPEN-AI	EUR 20.000.000,00	
DIGITAL-2022-CLOUD-AI- 02-TEF-MANUF	EUR 30.000.000,00	
DIGITAL-2022-CLOUD-AI- 02-TEF-HEALTH	EUR 30.000.000,00	
DIGITAL-2022-CLOUD-AI- 02-TEF-AGRIFOOD	EUR 30.000.000,00	
DIGITAL-2022-CLOUD-AI- 02-TEF-SMART	EUR 20.000.000,00	

We reserve the right not to award all available funds or to redistribute them between the call priorities, depending on the proposals received and the results of the evaluation.

#### 4. Timetable and deadlines

Timetable and deadlines (indicative)				
Call opening:	22 February 2022			
Deadline for submission:	<u>17 May 2022 – 17:00:00 CEST</u> (Brussels local time)			
Evaluation:	June-July 2022			
Information on evaluation results:	August 2022			
GA signature:	December 2022			

#### 5. Admissibility and documents

Proposals must be submitted before the **call deadline** (see timetable section 4).

Proposals must be submitted **electronically** via the Funding & Tenders Portal Electronic Submission System (accessible via the Topic page in the <u>Search Funding & Tenders</u> section). Paper submissions are NOT possible.

Proposals (including annexes and supporting documents) must be submitted using the forms provided *inside* the Submission System ( $^{1}$ NOT the documents available on the Topic page — they are only for information).

Proposals must be **complete** and contain all the requested information and all required annexes and supporting documents:

- Application Form Part A contains administrative information about the participants (future coordinator, beneficiaries and affiliated entities) and the summarised budget for the project (to be filled in directly online)
- Application Form Part B contains the technical description of the project (to be downloaded from the Portal Submission System, completed and then assembled and re-uploaded)
- **mandatory annexes and supporting documents** (to be uploaded):
  - detailed budget table/calculator: not applicable
  - CVs of core project team: not applicable
  - activity reports of last year: not applicable
  - list of previous projects (key projects for the last 4 years): applicable for DIGITAL-2022-CLOUD-AI-02-CANCER-IMAGE
  - ethics issues table: applicable
  - security issues table: applicable
  - ownership control declaration: applicable
  - other annex: TEF co-funding commitment letter: applicable for topics:

DIGITAL-2022-CLOUD-AI-02-TEF-MANUF

DIGITAL-2022-CLOUD-AI-02-TEF-HEALTH

DIGITAL-2022-CLOUD-AI-02-TEF-AGRIFOOD

DIGITAL-2022-CLOUD-AI-02-TEF-SMART

Description: This Annex should give an overview of the funding sources **per beneficiary.** It should say whether the co-financing comes from national or regional funding sources, private sources or from other EU funding programmes (e.g. European Regional Development Fund, Recovery & Resilience Facility) via synergy grants/combination of funding. The coordinator should **attach all co-financing commitment letters**<sup>31</sup> provided and signed by the competent public authorities to this overview.

<sup>&</sup>lt;sup>31</sup> Possible template text:

At proposal submission, you will have to confirm that you have the **mandate to act** for all applicants. Moreover you will have to confirm that the information in the application is correct and complete and that the participants comply with the conditions for receiving EU funding (especially eligibility, financial and operational capacity, exclusion, etc). Before signing the grant, each beneficiary and affiliated entity will have to confirm this again by signing a declaration of honour (DoH). Proposals without full support will be rejected.

Your application must be **readable**, **accessible and printable**.

Proposals are limited to maximum **70 pages** (Part B). Evaluators will not consider any additional pages.

You may be asked at a later stage for further documents (for legal entity validation, financial capacity check, bank account validation, etc).

For more information about the submission process (including IT aspects), consult the <u>Online Manual</u>.

#### 6. Eligibility

#### Eligible participants (eligible countries)

In order to be eligible, the applicants (beneficiaries and affiliated entities) must:

- be legal entities (public or private bodies)
- be established in one of the eligible countries, i.e.:
  - EU Member States (including overseas countries and territories (OCTs))
  - non-EU countries:
    - listed EEA countries
    - countries associated to the Digital Europe Programme (list of <u>countries</u>) or countries which are in ongoing negotiations for an association agreement and where the agreement enters into force before grant signature.<sup>32</sup> All applicants from an associated countries have to present a guarantee approved by the country, to comply with the conditions set out in the work programme Annex 3.

[Optional] We, [the competent public body], will use funding from EU funding [name EU fund, e.g. RRF or ERDF]. We are coordinating with the relevant granting authorities to ensure synergies between the different funding sources for this grant.

Yours sincerely,

Signatory [public authority/co-funder]

<sup>32</sup> Proposals including entities from countries which are in ongoing negotiations for an association agreement that does not enter into force before the signature of the grant might be declared ineligible. In those cases the consortium will be asked to replace the participant concerned (or redistribute the tasks between the other participants). If this is not possible and the consortium cannot propose any other acceptable solution, the proposal will have to be rejected.

To whom it may concern,

In the context of the Artificial Intelligence sectorial Testing and Experimentation Facilities (TEFs) calls under the Digital Europe Programme (DIGITAL), we hereby confirm that [competent public body] commits to cofund the [beneficiary] of the [consortium], should it be selected by the European Commission, with [amount] within the [agri-food/healthcare/manufacturing/smart cities and communities AI TEF call].

Beneficiaries and affiliated entities must register in the <u>Participant Register</u> — before submitting the proposal — and will have to be validated by the Central Validation Service (REA Validation). For the validation, they will be requested to upload documents showing legal status and origin.

Please be aware that **all topics of this call are subject to restrictions due to security**, therefore entities must not be directly or indirectly controlled from a country that is not an eligible country. **All entities<sup>33</sup> have to fill in and submit a declaration on ownership and control.** 

Moreover:

- participation in any capacity (as beneficiary, affiliated entity, associated partner, subcontractor or recipient of financial support to third parties) is limited to entities from eligible countries
- project activities (included subcontracted work) must take place in eligible countries (see section geographic location below and section 10)
- the Grant Agreement may provide for IPR restrictions (see section 10).

#### Specific cases

Natural persons — Natural persons are NOT eligible (with the exception of selfemployed persons, i.e. sole traders, where the company does not have legal personality separate from that of the natural person).

International organisations — International organisations are not eligible, unless they are International organisations of European Interest within the meaning of Article 2 of the Digital Europe Regulation (i.e. international organisations the majority of whose members are Member States or whose headquarters are in a Member State).

Entities without legal personality — Entities which do not have legal personality under their national law may exceptionally participate, provided that their representatives have the capacity to undertake legal obligations on their behalf, and offer guarantees for the protection of the EU financial interests equivalent to that offered by legal persons<sup>34</sup>.

EU bodies — EU bodies (with the exception of the European Commission Joint Research Centre) can NOT be part of the consortium.

Associations and interest groupings — Entities composed of members may participate as 'sole beneficiaries' or 'beneficiaries without legal personality'<sup>35</sup>. A Please note that if the action will be implemented by the members, they should also participate (either as beneficiaries or as affiliated entities, otherwise their costs will NOT be eligible).

Countries currently negotiating association agreements — Beneficiaries from countries with ongoing negotiations *(see above)* may participate in the call and can sign grants if the negotiations are concluded before grant signature (with retroactive effect, if provided in the agreement).

EU restrictive measures — Special rules apply for certain entities (*e.g. entities subject* to <u>EU restrictive measures</u> under Article 29 of the Treaty on the European Union (TEU) and Article 215 of the Treaty on the Functioning of the EU (TFEU)<sup>36</sup> and entities

<sup>&</sup>lt;sup>33</sup> Except for entities that are validated as public bodies by the Central Validation Service.

<sup>&</sup>lt;sup>34</sup> See Article 197(2)(c) EU Financial Regulation 2018/1046.

<sup>&</sup>lt;sup>35</sup> For the definitions, see Articles 187(2) and 197(2)(c) EU Financial Regulation 2018/1046.

<sup>&</sup>lt;sup>36</sup> Please note that the EU Official Journal contains the official list and, in case of conflict, its content prevails over that of the <u>EU Sanctions Map</u>.

*covered by Commission Guidelines No <u>2013/C 205/05</u><sup>37</sup>). Such entities are not eligible to participate in any capacity, including as beneficiaries, affiliated entities, associated partners, subcontractors or recipients of financial support to third parties (if any).* 

For more information, see <u>Rules for Legal Entity Validation, LEAR Appointment and</u> <u>Financial Capacity Assessment</u>.

#### Consortium composition

Proposals must be submitted by:

#### for topic **DIGITAL-2022-CLOUD-AI-02-CANCER-IMAGE**:

 minimum 5 independent applicants (beneficiaries; not affiliated entities) from 5 different eligible countries

#### for topic DIGITAL-2022-CLOUD-AI-02-SEC-LAW :

 minimum 3 law enforcement authorities (beneficiaries; not affiliated entities) from at least 3 different EU Member States

#### for topic DIGITAL-2022-CLOUD-AI-02-OPEN-AI:

- minimum 3 applicants (beneficiaries; not affiliated entities)
- at least one applicant is a public sector body in the scope of the Open Data  $\rm Directive^{38}$

for topics:

#### DIGITAL-2022-CLOUD-AI-02-TEF-MANUF

#### DIGITAL-2022-CLOUD-AI-02-TEF-HEALTH

#### DIGITAL-2022-CLOUD-AI-02-TEF-AGRIFOOD

 minimum 4 independent applicants (beneficiaries; not affiliated entities) from 4 different eligible countries

#### for topic **DIGITAL-2022-CLOUD-AI-02-TEF-SMART**

 minimum 3 independent applicants (beneficiaries; not affiliated entities) from 3 different eligible countries

#### Eligible activities

Eligible activities are the ones set out in section 2 above.

Projects should take into account the results of projects supported by other EU funding programmes. The complementarities must be described in the project proposals (Part B of the Application Form).

<sup>&</sup>lt;sup>37</sup> Commission guidelines No 2013/C 205/05 on the eligibility of Israeli entities and their activities in the territories occupied by Israel since June 1967 for grants, prizes and financial instruments funded by the EU from 2014 onwards (OJEU C 205 of 19.07.2013, pp. 9-11).

<sup>&</sup>lt;sup>38</sup> <u>Directive (EU) 2019/1024 of the European Parliament and of the Council of 20 June 2019 on open data</u> <u>and the re-use of public sector information</u>

Projects must comply with EU policy interests and priorities (such as environment, social, security, industrial and trade policy, etc).

Financial support to third parties is allowed in topic **DIGITAL-2022-CLOUD-AI-02-CANCER-IMAGE** for grants under the following conditions:

- the calls must be open, published widely and conform to EU standards concerning transparency, equal treatment, conflict of interest and confidentiality
- the calls must be published on the Funding & Tenders Portal, and on the participants' websites
- the calls must remain open for at least two months
- if call deadlines are changed this must immediately be published on the Portal and all registered applicants must be informed of the change
- the outcome of the call must be published on the participants' websites, including a description of the selected projects, award dates, project durations, and final recipient legal names and countries
- the calls must have a clear European dimension.

If you want to use the financial support to third parties, your project application must clearly specify why financial support to third parties is needed, how it will be managed and provide a list of the different types of activities for which a third party may receive financial support. The proposal must also clearly describe the results to be obtained.

#### Geographic location (target countries)

Due to restrictions due to security:

- the proposals must relate to activities taking place in the eligible countries *(see above)* 

#### <u>Ethics</u>

Projects must comply with:

- highest ethical standards and
- applicable EU, international and national law (including the <u>General Data</u> <u>Protection Regulation 2016/679</u>).

Proposals under this call for proposals will have to undergo an ethics review to authorise funding and may be made subject to specific ethics rules (which become part of the Grant Agreement in the form of ethics deliverables, *e.g. ethics committee opinions/notifications/authorisations required under national or EU law*).

For proposals involving development, testing, deployment, use or distribution of AI systems, the ethics review will in particular check compliance with the principles of human agency and oversight, diversity/fairness, transparency and responsible social impact, while the experts performing the technical evaluation will assess the robustness of the AI systems (i.e. their reliability not to cause unintentional harm).

#### <u>Security</u>

Projects involving EU classified information must undergo security scrutiny to authorise funding and may be made subject to specific security rules (detailed in a security aspects letter (SAL) which is annexed to the Grant Agreement).

These rules (governed by Decision  $2015/444^{39}$  and its implementing rules and/or national rules) provide for instance that:

- projects involving information classified TRES SECRET UE/EU TOP SECRET (or equivalent) can NOT be funded
- classified information must be marked in accordance with the applicable security instructions in the SAL
- information with classification levels CONFIDENTIEL UE/EU CONFIDENTIAL or above (and RESTREINT UE/ EU RESTRICTED, if required by national rules) may be:
  - created or accessed only on premises with facility security clearing (FSC) from the competent national security authority (NSA), in accordance with the national rules
  - handled only in a secured area accredited by the competent NSA
  - accessed and handled only by persons with valid personnel security clearance (PSC) and a need-to-know
- at the end of the grant, the classified information must either be returned or continue to be protected in accordance with the applicable rules
- action tasks involving EU classified information (EUCI) may be subcontracted only with prior written approval from the granting authority and only to entities established in an EU Member State or in a non-EU country with a security of information agreement with the EU (or an administrative arrangement with the Commission)
- disclosure of EUCI to third parties is subject to prior written approval from the granting authority.

Please note that, depending on the type of activity, facility security clearing may have to be provided before grant signature. The granting authority will assess the need for clearing in each case and will establish their delivery date during grant preparation. Please note that in no circumstances can we sign any grant agreement until at least one of the beneficiaries in a consortium has facility security clearing.

Further security recommendations may be added to the Grant Agreement in the form of security deliverables (*e.g. create security advisory group, limit level of detail, use fake scenario, exclude use of classified information, etc*).

Beneficiaries must ensure that their projects are not subject to national/third-country security requirements that could affect implementation or put into question the award of the grant (*e.g. technology restrictions, national security classification, etc*). The granting authority must be notified immediately of any potential security issues.

#### 7. Financial and operational capacity and exclusion

Financial capacity

<sup>&</sup>lt;sup>39</sup> See Commission Decision 2015/544/EU, Euratom of 13 March 2015 on the security rules for protecting EU classified information (OJ L 72, 17.3.2015, p. 53).

Applicants must have **stable and sufficient resources** to successfully implement the projects and contribute their share. Organisations participating in several projects must have sufficient capacity to implement all these projects.

The financial capacity check will be carried out on the basis of the documents you will be requested to upload in the <u>Participant Register</u> during grant preparation (*e.g. profit and loss account and balance sheet, business plan, audit report produced by an approved external auditor, certifying the accounts for the last closed financial year, etc).* The analysis will be based on neutral financial indicators, but will also take into account other aspects, such as dependency on EU funding and deficit and revenue in previous years.

The check will normally be done for all beneficiaries, except:

- public bodies (entities established as public body under national law, including local, regional or national authorities) or international organisations
- if the individual requested grant amount is not more than EUR 60 000.

If needed, it may also be done for affiliated entities.

If we consider that your financial capacity is not satisfactory, we may require:

- further information
- an enhanced financial responsibility regime, i.e. joint and several responsibility for all beneficiaries or joint and several liability of affiliated entities (see below, section 10)
- prefinancing paid in instalments
- (one or more) prefinancing guarantees (see below, section 10)

or

- propose no prefinancing
- request that you are replaced or, if needed, reject the entire proposal.

For more information, see <u>Rules for Legal Entity Validation, LEAR Appointment and</u> <u>Financial Capacity Assessment</u>.

#### **Operational capacity**

Applicants must have the **know-how**, **qualifications** and **resources** to successfully implement the projects and contribute their share (including sufficient experience in projects of comparable size and nature).

This capacity will be assessed together with the 'Implementation' award criterion, on the basis of the competence and experience of the applicants and their project teams, including operational resources (human, technical and other) or, exceptionally, the measures proposed to obtain it by the time the task implementation starts.

If the evaluation of the award criterion is positive, the applicants are considered to have sufficient operational capacity.

Applicants will have to show their capacity via the following information:

- general profiles (qualifications and experiences) of the staff responsible for managing and implementing the project
- description of the consortium participants

 list of previous projects (key projects for the last 4 years) for topics made applicable in section 5

Additional supporting documents may be requested, if needed to confirm the operational capacity of any applicant.

#### Exclusion

Applicants which are subject to an **EU exclusion decision** or in one of the following **exclusion situations** that bar them from receiving EU funding can NOT participate<sup>40</sup>:

- bankruptcy, winding up, affairs administered by the courts, arrangement with creditors, suspended business activities or other similar procedures (including procedures for persons with unlimited liability for the applicant's debts)
- in breach of social security or tax obligations (including if done by persons with unlimited liability for the applicant's debts)
- guilty of grave professional misconduct<sup>41</sup> (including if done by persons having powers of representation, decision-making or control, beneficial owners or persons who are essential for the award/implementation of the grant)
- committed fraud, corruption, links to a criminal organisation, money laundering, terrorism-related crimes (including terrorism financing), child labour or human trafficking (including if done by persons having powers of representation, decision-making or control, beneficial owners or persons who are essential for the award/implementation of the grant)
- shown significant deficiencies in complying with main obligations under an EU procurement contract, grant agreement, prize, expert contract, or similar (including if done by persons having powers of representation, decision-making or control, beneficial owners or persons who are essential for the award/implementation of the grant)
- guilty of irregularities within the meaning of Article 1(2) of Regulation No <u>2988/95</u> (including if done by persons having powers of representation, decision-making or control, beneficial owners or persons who are essential for the award/implementation of the grant)
- created under a different jurisdiction with the intent to circumvent fiscal, social or other legal obligations in the country of origin or created another entity with this purpose (including if done by persons having powers of representation, decision-making or control, beneficial owners or persons who are essential for the award/implementation of the grant).

Applicants will also be refused if it turns out that<sup>42</sup>:

- during the award procedure they misrepresented information required as a condition for participating or failed to supply that information
- they were previously involved in the preparation of the call and this entails a distortion of competition that cannot be remedied otherwise (conflict of interest).

<sup>&</sup>lt;sup>40</sup> See Articles 136 and 141 of EU Financial Regulation <u>2018/1046</u>.

<sup>&</sup>lt;sup>41</sup> Professional misconduct includes: violation of ethical standards of the profession, wrongful conduct with impact on professional credibility, false declarations/misrepresentation of information, participation in a cartel or other agreement distorting competition, violation of IPR, attempting to influence decision-making processes or obtain confidential information from public authorities to gain advantage.

<sup>&</sup>lt;sup>42</sup> See Article 141 EU Financial Regulation <u>2018/1046</u>.

#### 8. Evaluation and award procedure

The proposals will have to follow the **standard submission and evaluation procedure** (one-stage submission + one-step evaluation).

An **evaluation committee** (composed or assisted by independent outside experts) will assess all applications. Proposals will first be checked for formal requirements (admissibility, and eligibility, *see sections 5 and 6*). Proposals found admissible and eligible will be evaluated (for each topic) against the operational capacity and award criteria (*see sections 7 and 9*) and then ranked according to their scores.

For proposals with the same score (within a topic or budget envelope) a **priority order** will be determined according to the following approach:

Successively for every group of *ex aequo* proposals, starting with the highest scored group, and continuing in descending order:

- 1) Proposals focusing on a theme that is not otherwise covered by higher ranked proposals will be considered to have the highest priority.
- 2) The ex aequo proposals within the same topic will be prioritised according to the scores they have been awarded for the award criterion 'Relevance'. When these scores are equal, priority will be based on their scores for the criterion 'Impact'. When these scores are equal, priority will be based on their scores for the criterion 'Implementation'.
- 3) If this does not allow to determine the priority, a further prioritisation can be done by considering the overall proposal portfolio and the creation of positive synergies between proposals, or other factors related to the objectives of the call. These factors will be documented in the panel report.
- 4) After that, the remainder of the available call budget will be used to fund projects across the different topics in order to ensure a balanced spread of the geographical and thematic coverage and while respecting to the maximum possible extent the order of merit based on the evaluation of the award criteria.

All proposals will be informed about the evaluation result (**evaluation result letter**). Successful proposals will be invited for grant preparation; the other ones will be put on the reserve list or rejected.

▲ No commitment for funding — Invitation to grant preparation does NOT constitute a formal commitment for funding. We will still need to make various legal checks before grant award: *legal entity validation, financial capacity, exclusion check, etc.* 

**Grant preparation** will involve a dialogue in order to fine-tune technical or financial aspects of the project and may require extra information from your side. It may also include adjustments to the proposal to address recommendations of the evaluation committee or other concerns. Compliance will be a pre-condition for signing the grant.

If you believe that the evaluation procedure was flawed, you can submit a **complaint** (following the deadlines and procedures set out in the evaluation result letter). Please note that notifications which have not been opened within 10 days after sending are considered to have been accessed and that deadlines will be counted from opening/access (*see also Funding & Tenders Portal Terms and Conditions*). Please also be aware that for complaints submitted electronically, there may be character limitations.

#### 9. Award criteria

The **award criteria** for this call are as follows:

- Relevance
  - Alignment with the objectives and activities as described in section 2
  - Contribution to long-term policy objectives, relevant policies and strategies, and synergies with activities at European and national level
  - Extent to which the project would reinforce and secure the digital technology supply chain in the EU\*
  - Extent to which the project can overcome financial obstacles such as the lack of market finance\*

#### - Implementation

- Maturity of the project
- Soundness of the implementation plan and efficient use of resources
- Capacity of the applicants, and when applicable the consortium as a whole, to carry out the proposed work

#### – Impact

- Extent to which the project will achieve the expected outcomes and deliverables referred to in the call for proposals and, where relevant, the plans to disseminate and communicate project achievements
- Extent to which the project will strengthen competitiveness and bring important benefits for society
- Extent to which the project addresses environmental sustainability and the European Green Deal goals, in terms of direct effects and/or in awareness of environmental effects \*.

\*May not be applicable to all topics (see specific topic conditions in section 2).

Award criteria	Minimum pass score	Maximum score
Relevance	3	5
Implementation	3	5
Impact	3	5
Overall (pass) scores	10	15

Maximum points: 15 points.

Individual thresholds per criterion: 3/5, 3/5 and 3/5 points.

Overall threshold: 10 points.

Proposals that pass the individual thresholds AND the overall threshold will be considered for funding — within the limits of the available call budget. Other proposals will be rejected.

#### **10.** Legal and financial set-up of the Grant Agreements

If you pass evaluation, your project will be invited for grant preparation, where you will be asked to prepare the Grant Agreement together with the EU Project Officer.

This Grant Agreement will set the framework for your grant and its terms and conditions, in particular concerning deliverables, reporting and payments.

The Model Grant Agreement that will be used (and all other relevant templates and guidance documents) can be found on <u>Portal Reference Documents</u>.

Starting date and project duration

The project starting date and duration will be fixed in the Grant Agreement (*Data Sheet, point 1*). Normally the starting date will be after grant signature. Retroactive application can be granted exceptionally for duly justified reasons — but never earlier than the proposal submission date.

Project duration:

- between 36 and 48 months for topic DIGITAL-2022-CLOUD-AI-02-CANCER-IMAGE
- 36 months for topic **DIGITAL-2022-CLOUD-AI-02-SEC-LAW**
- between 12 and 36 months for topic DIGITAL-2022-CLOUD-AI-02-OPEN-AI
- between 48 and 60 months for topics DIGITAL-2022-CLOUD-AI-02-TEF-HEALTH and DIGITAL-2022-CLOUD-AI-02-TEF-SMART.
- 60 months for topics DIGITAL-2022-CLOUD-AI-02-TEF-MANUF and DIGITAL-2022-CLOUD-AI-02-TEF-AGRIFOOD

Extensions are possible, if duly justified and through an amendment.

#### Milestones and deliverables

The milestones and deliverables for each project will be managed through the Portal Grant Management System and will be reflected in Annex 1 of the Grant Agreement.

The following deliverables will be mandatory for all projects:

 additional deliverable on dissemination and exploitation, to be submitted in the first six months of the project

Form of grant, funding rate and maximum grant amount

The grant parameters (*maximum grant amount, funding rate, total eligible costs, etc*) will be fixed in the Grant Agreement (*Data Sheet, point 3 and art 5*).

Project budget (maximum grant amount):

- EUR 18 000 000 per project for topic: DIGITAL-2022-CLOUD-AI-02-CANCER-IMAGE
- EUR 8 000 000 per project for the topic DIGITAL-2022-CLOUD-AI-02-SEC-LAW
- between EUR 4 million and EUR 6 million per project for topic DIGITAL-2022-CLOUD-AI-02-OPEN-AI

- EUR 30 000 000 per project for topic: DIGITAL-2022-CLOUD-AI-02-TEF-MANUF; DIGITAL-2022-CLOUD-AI-02-TEF-HEALTH; DIGITAL-2022-CLOUD-AI-02-TEF-AGRIFOOD.
- EUR 20 000 000 per project for topic: DIGITAL-2022-CLOUD-AI-02-TEF-SMART

The grant awarded may be lower than the amount requested.

The grant will be a budget-based mixed actual cost grant (actual costs, with unit cost and flat-rate elements). This means that it will reimburse ONLY certain types of costs (eligible costs) and costs that were *actually* incurred for your project (NOT the *budgeted* costs). For unit costs and flat-rates, you can charge the amounts calculated as explained in the Grant Agreement (*see art 6 and Annex 2 and 2a*).

The costs will be reimbursed at the funding rate fixed in the Grant Agreement. This rate depends on the type of action which applies to the topic, *see section 2*.Grants may NOT produce a profit (i.e. surplus of revenues + EU grant over costs). For-profit organisations must declare their revenues and, if there is a profit, we will deduct it from the final grant amount (*see art 22.3*).

Moreover, please be aware that the final grant amount may be reduced in case of non-compliance with the Grant Agreement (*e.g. improper implementation, breach of obligations, etc*).

#### Budget categories and cost eligibility rules

The budget categories and cost eligibility rules are fixed in the Grant Agreement (Data Sheet, point 3 and art 6).

#### Budget categories for this call:

- A. Personnel costs
  - A.1 Employees, A.2 Natural persons under direct contract, A.3 Seconded persons
  - A.4 SME owners and natural person beneficiaries
- B. Subcontracting costs
- C. Purchase costs
  - C.1 Travel and subsistence
  - C.2 Equipment
  - C.3 Other goods, works and services
- D. Other cost categories
  - D.1 Financial support to third parties (for topics DIGITAL-2022-CLOUD-AI-02-CANCER-IMAGE)
  - D.2 Internally invoiced goods and services
- E. Indirect costs

#### Specific cost eligibility conditions for this call:

- personnel costs:
  - average personnel costs (unit cost according to usual cost accounting practices): Yes

- SME owner/natural person unit cost<sup>43</sup>: Yes
- travel and subsistence unit costs<sup>44</sup>: No (only actual costs)
- equipment costs:
  - depreciation (for topic **DIGITAL-2022-CLOUD-AI-02-OPEN-AI**)
  - depreciation + full cost for listed equipment (for topics DIGITAL-2022-CLOUD-AI-02-CANCER-IMAGE; DIGITAL-2022-CLOUD-AI-02-SEC-LAW; DIGITAL-2022-CLOUD-AI-02-TEF-MANUF; DIGITAL-2022-CLOUD-AI-02-TEF-HEALTH; DIGITAL-2022-CLOUD-AI-02-TEF-AGRIFOOD; DIGITAL-2022-CLOUD-AI-02-TEF-SMART)
- other cost categories:
  - costs for financial support to third parties: allowed for grants:
    - for topic DIGITAL-2022-CLOUD-AI-02-CANCER-IMAGE: maximum amount per third party EUR 200 000; amounts of more than 60 000 EUR per third party are necessary because the nature of the actions under this call is such that their objectives would otherwise be impossible or overly difficult to achieve;
    - not exceeding 30% of the total grant amount
    - a maximum of EUR 400 000 per eligible country
    - the third parties have to be independent from each other
    - Financial support to third parties may be proposed, if deemed necessary to achieve the objectives of the action, for extension and adaptation of cancer image data sources, training AI algorithms and/or implementation of awareness raising activities.
    - In particular, the sub-grants can be used for one or several of following purposes:
      - establishment of longer-term collaboration with cancer image data providers, including addressing the legal issues, elaboration of data processing agreements, joint controllers' agreements etc.;
      - establishment or upgrade of technical infrastructure, necessary e.g. to connect national cancer image data sources to the federated European cancer image data infrastructure, based on clear business models;
      - cancer image annotation and curation, including devising and applying common annotation protocols, in line with the infrastructure requirements;

<sup>&</sup>lt;sup>43</sup> Commission <u>Decision</u> of 20 October 2020 authorising the use of unit costs for the personnel costs of the owners of small and medium-sized enterprises and beneficiaries that are natural persons not receiving a salary for the work carried out by themselves under an action or work programme (C(2020)7715).

<sup>&</sup>lt;sup>44</sup> Commission <u>Decision</u> of 12 January 2021 authorising the use of unit costs for travel, accommodation and subsistence costs under an action or work programme under the 2021-2027 multi-annual financial framework (C(2021)35).

- training of trustworthy AI algorithms and prediction models of outcomes using the cancer imaging data available in the infrastructure;
- relevant awareness raising, including targeted up-skilling activities, for example necessary to join the network or for healthcare professionals to maximize the uptake of data, tools and services in clinical settings.
- internally invoiced goods and services (costs unit cost according to usual cost accounting practices): Yes
- indirect cost flat-rate: 7% of the eligible direct costs (categories A-D, except volunteers costs and exempted specific cost categories, if any).
- VAT: non-deductible VAT is eligible (but please note that since 2013 VAT paid by beneficiaries that are public bodies acting as public authority is NOT eligible)
- other:
  - in-kind contributions for free are allowed, but cost-neutral, i.e. they cannot be declared as cost
  - kick-off meeting: costs for kick-off meeting organised by the granting authority are eligible (travel costs for maximum 2 persons, return ticket to Brussels and accommodation for one night) only if the meeting takes place after the project starting date set out in the Grant Agreement; the starting date can be changed through an amendment, if needed
  - project websites: communication costs for presenting the project on the participants' websites or social media accounts are eligible; costs for separate project websites are not eligible
- EU Synergies call: Yes, costs can be charged to several EU Synergies grants, provided that the funding under the grants does not go above 100% of the costs and contributions declared to them (for topics DIGITAL-2022-CLOUD-AI-02-CANCER-IMAGE, DIGITAL-2022-CLOUD-AI-02-TEF-MANUF, DIGITAL-2022-CLOUD-AI-02-TEF-HEALTH, DIGITAL-2022-CLOUD-AI-02-TEF-AGRIFOOD, DIGITAL-2022-CLOUD-AI-02-TEF-SMART
  - restrictions due to security:
    - country restrictions for subcontracting costs: Yes, subcontracted work must be performed in the eligible countries
    - eligible cost country restrictions: Yes, only costs for activities carried out in eligible countries are eligible.

#### Reporting and payment arrangements

The reporting and payment arrangements are fixed in the Grant Agreement (Data Sheet, point 4 and art 21 and 22).

After grant signature, you will normally receive a **prefinancing** to start working on the project (float of normally **50%** of the maximum grant amount; exceptionally less or no prefinancing). The prefinancing will be paid 30 days from entry into force/10 days before starting date/financial guarantee (if required) – whichever is the latest.

There will be one or more **interim payments** (with cost reporting through the use of resources report).

**Payment of the balance**: At the end of the project, we will calculate your final grant amount. If the total of earlier payments is higher than the final grant amount, we will ask you (your coordinator) to pay back the difference (recovery).

All payments will be made to the coordinator.

Please be aware that payments will be automatically lowered if one of your consortium members has outstanding debts towards the EU (granting authority or other EU bodies). Such debts will be offset by us — in line with the conditions set out in the Grant Agreement (see art 22).

Please also note that you are responsible for keeping records on all the work done and the costs declared.

#### Prefinancing guarantees

If a prefinancing guarantee is required, it will be fixed in the Grant Agreement (*Data Sheet, point 4*). The amount will be set during grant preparation and it will normally be equal or lower than the prefinancing for your grant.

The guarantee should be in euro and issued by an approved bank/financial institution established in an EU Member State. If you are established in a non-EU country and would like to provide a guarantee from a bank/financial institution in your country, please contact us (this may be exceptionally accepted, if it offers equivalent security).

Amounts blocked in bank accounts will NOT be accepted as financial guarantees.

Prefinancing guarantees are formally NOT linked to individual consortium members, which means that you are free to organise how to provide the guarantee amount (by one or several beneficiaries, for the overall amount or several guarantees for partial amounts, by the beneficiary concerned or by another beneficiary, etc). It is however important that the requested amount is covered and that the guarantee(s) are sent to us in time to make the prefinancing (scanned copy via Portal AND original by post).

If agreed with us, the bank guarantee may be replaced by a guarantee from a third party.

The guarantee will be released at the end of the grant, in accordance with the conditions laid down in the Grant Agreement.

#### <u>Certificates</u>

Depending on the type of action, size of grant amount and type of beneficiaries, you may be requested to submit different certificates. The types, schedules and thresholds for each certificate are fixed in the Grant Agreement (*Data Sheet, point 4 and art 24*).

Liability regime for recoveries

The liability regime for recoveries will be fixed in the Grant Agreement (*Data Sheet point 4.4 and art 22*).

For beneficiaries, it is one of the following:

- limited joint and several liability with individual ceilings each beneficiary up to their maximum grant amount
- unconditional joint and several liability each beneficiary up to the maximum grant amount for the action

- individual financial responsibility - each beneficiary only for their own debts.

In addition, the granting authority may require joint and several liability of affiliated entities (with their beneficiary).

Provisions concerning the project implementation

Security rules: see Model Grant Agreement (art 13 and Annex 5)

Ethics rules: see Model Grant Agreement (art 14 and Annex 5)

IPR rules: see Model Grant Agreement (art 16 and Annex 5):

- background and list of background: Yes
- protection of results: Yes
- exploitation of results: Yes
- rights of use on results: Yes
- access to results for policy purposes: Yes
- access rights for the granting authority to results in case of a public emergency: Yes
- access rights to ensure continuity and interoperability obligations: No
- special IPR obligations linked to restrictions due to security:
  - exploitation in eligible countries: Yes
  - first exploitation obligation in eligible countries: Yes for topics DIGITAL-2022-CLOUD-AI-02-TEF-MANUF, DIGITAL-2022-CLOUD-AI-02-TEF-HEALTH, DIGITAL-2022-CLOUD-AI-02-TEF-AGRIFOOD, DIGITAL-2022-CLOUD-AI-02-TEF-SMART)
  - limitations to transfers and licensing: Yes

Communication, dissemination and visibility of funding: see Model Grant Agreement (art 17 and Annex 5):

- communication and dissemination plan: Yes
- dissemination of results: Yes
- additional dissemination obligations: No
- additional communication activities: Yes
- special logo: No

Specific rules for carrying out the action: see Model Grant Agreement (art 18 and Annex 5):

- specific rules for PAC Grants for Procurement: No
- specific rules for Grants for Financial Support: No
- specific rules for blending operations: No
- special obligations linked to restrictions due to security:

implementation in case of restrictions due to security or EU strategic autonomy: Yes

Other specificities

n/a

#### Non-compliance and breach of contract

The Grant Agreement (chapter 5) provides for the measures we may take in case of breach of contract (and other non-compliance issues).

If For more information, see <u>AGA — Annotated Grant Agreement</u>.

#### **11.** How to submit an application

All proposals must be submitted directly online via the Funding & Tenders Portal Electronic Submission System. Paper applications are NOT accepted.

Submission is a **2-step process**:

#### a) create a user account and register your organisation

To use the Submission System (the only way to apply), all participants need to <u>create</u> an <u>EU Login user account</u>.

Once you have an EULogin account, you can <u>register your organisation</u> in the Participant Register. When your registration is finalised, you will receive a 9-digit participant identification code (PIC).

#### b) submit the proposal

Access the Electronic Submission System via the Topic page in the <u>Search Funding &</u> <u>Tenders</u> section (or, for calls sent by invitation to submit a proposal, through the link provided in the invitation letter).

Submit your proposal in 3 parts, as follows:

- Part A includes administrative information about the applicant organisations (future coordinator, beneficiaries, affiliated entities and associated partners) and the summarised budget for the proposal. Fill it in directly online
- Part B (description of the action) covers the technical content of the proposal.
  Download the mandatory word template from the Submission System, fill it in and upload it as a PDF file
- Annexes (see section 5). Upload them as PDF file (single or multiple depending on the slots). Excel upload is sometimes possible, depending on the file type.

The proposal must keep to the **page limits** (see section 5); excess pages will be disregarded.

Documents must be uploaded to the **right category** in the Submission System otherwise the proposal might be considered incomplete and thus inadmissible.

The proposal must be submitted **before the call deadline** (*see section 4*). After this deadline, the system is closed and proposals can no longer be submitted.

Once the proposal is submitted, you will receive a **confirmation e-mail** (with date and time of your application). If you do not receive this confirmation e-mail, it means your proposal has NOT been submitted. If you believe this is due to a fault in the Submission System, you should immediately file a complaint via the <u>IT Helpdesk</u> webform, explaining the circumstances and attaching a copy of the proposal (and, if possible, screenshots to show what happened).

Details on processes and procedures are described in the <u>Online Manual</u>. The Online Manual also contains the links to FAQs and detailed instructions regarding the Portal Electronic Exchange System.

#### 12. Help

As far as possible, *please try to find the answers you need yourself*, in this and the other documentation (we have limited resources for handling direct enquiries):

- Online Manual
- FAQs on the Topic page (for call-specific questions in open calls; not applicable for actions by invitation)
- <u>Portal FAQ</u> (for general questions).

Please also consult the Topic page regularly, since we will use it to publish call updates. (For invitations, we will contact you directly in case of a call update).

#### Contact

For individual questions on the Portal Submission System, please contact the  $\underline{IT}$  <u>Helpdesk</u>.

Non-IT related questions should be sent to "Write to us"

Please indicate clearly the reference of the call and topic to which your question relates (see cover page).

#### 13. Important

#### \rm IMPORTANT

- Don't wait until the end Complete your application sufficiently in advance of the deadline to avoid any last minute technical problems. Problems due to last minute submissions (e.g. congestion, etc) will be entirely at your risk. Call deadlines can NOT be extended.
- **Consult** the Portal Topic page regularly. We will use it to publish updates and additional information on the call (call and topic updates).
- Funding & Tenders Portal Electronic Exchange System By submitting the application, all participants accept to use the electronic exchange system in accordance with the Portal Terms & Conditions.
- **Registration** Before submitting the application, all beneficiaries, affiliated entities and associated partners must be registered in the <u>Participant Register</u>. The participant identification code (PIC) (one per participant) is mandatory for the Application Form.
- **Consortium roles** When setting up your consortium, you should think of organisations that help you reach objectives and solve problems.

The roles should be attributed according to the level of participation in the project. Main participants should participate as **beneficiaries** or **affiliated entities**; other entities can participate as associated partners, subcontractors, third parties giving in-kind contributions. **Associated partners** and third parties giving in-kind contributions should bear their own costs (they will not become formal recipients of EU funding). **Subcontracting** should normally constitute a limited part and must be performed by third parties (not by one of the beneficiaries/affiliated entities). Subcontracting going beyond 30% of the total eligible costs must be justified in the application.

- **Coordinator** In multi-beneficiary grants, the beneficiaries participate as consortium (group of beneficiaries). They will have to choose a coordinator, who will take care of the project management and coordination and will represent the consortium towards the granting authority. In mono-beneficiary grants, the single beneficiary will automatically be coordinator.
- Affiliated entities Applicants may participate with affiliated entities (i.e. entities linked to a beneficiary which participate in the action with similar rights and obligations as the beneficiaries, but do not sign the grant and therefore do not become beneficiaries themselves). They will get a part of the grant money and must therefore comply with all the call conditions and be validated (just like beneficiaries); but they do not count towards the minimum eligibility criteria for consortium composition (if any).
- **Associated partners** Applicants may participate with associated partners (i.e. partner organisations which participate in the action but without the right to get grant money). They participate without funding and therefore do not need to be validated.
- Consortium agreement For practical and legal reasons it is recommended to set up internal arrangements that allow you to deal with exceptional or unforeseen circumstances (in all cases, even if not mandatory under the Grant Agreement). The consortium agreement also gives you the possibility to redistribute the grant money according to your own consortium-internal principles and parameters (for instance, one beneficiary can reattribute its grant money to another beneficiary). The consortium agreement thus allows you to customise the EU grant to the needs inside your consortium and can also help to protect you in case of disputes.

- **Balanced project budget** Grant applications must ensure a balanced project budget and sufficient other resources to implement the project successfully (*e.g.* own contributions, income generated by the action, financial contributions from third parties, etc). You may be requested to lower your estimated costs, if they are ineligible (including excessive).
- No-profit rule (n/a for FPAs) Grants may NOT give a profit (i.e. surplus of revenues + EU grant over costs). This will be checked by us at the end of the project.
- No double funding (n/a for FPAs) There is a strict prohibition of double funding from the EU budget (except under EU Synergies actions). Outside such Synergies actions, any given action may receive only ONE grant from the EU budget and cost items may under NO circumstances declared to two different EU actions.
- Completed/ongoing projects Proposals for projects that have already been completed will be rejected; proposals for projects that have already started will be assessed on a case-by-case basis (in this case, no costs can be reimbursed for activities that took place before the project starting date/proposal submission).
- Combination with EU operating grants (n/a for FPAs) Combination with EU operating grants is possible, if the project remains outside the operating grant work programme and you make sure that cost items are clearly separated in your accounting and NOT declared twice (see <u>AGA Annotated Model Grant Agreement, art 6.2.E</u>).
- **Multiple proposals** Applicants may submit more than one proposal for *different* projects under the same call (and be awarded a funding for them).

Organisations may participate in several proposals.

BUT: if there are several proposals for *very similar* projects, only one application will be accepted and evaluated; the applicants will be asked to withdraw one of them (or it will be rejected).

- **Resubmission** Proposals may be changed and re-submitted until the deadline for submission.
- **Rejection** By submitting the application, all applicants accept the call conditions set out in this this Call Document (and the documents it refers to). Proposals that do not comply with all the call conditions will be **rejected**. This applies also to applicants: All applicants need to fulfil the criteria; if any one of them doesn't, they must be replaced or the entire proposal will be rejected.
- **Cancellation** There may be circumstances which may require the cancellation of the call. In this case, you will be informed via a call or topic update. Please note that cancellations are without entitlement to compensation.
- **Language** You can submit your proposal in any official EU language (project abstract/summary should however always be in English). For reasons of efficiency, we strongly advise you to use English for the entire application. If you need the call documentation in another official EU language, please submit a request within 10 days after call publication (for the contact information, *see section 12*).

- Transparency In accordance with Article 38 of the <u>EU Financial Regulation</u>, information about EU grants awarded is published each year on the <u>Europa website</u>. This includes:
  - o beneficiary names
  - o beneficiary addresses
  - the purpose for which the grant was awarded
  - the maximum amount awarded.

The publication can exceptionally be waived (on reasoned and duly substantiated request), if there is a risk that the disclosure could jeopardise your rights and freedoms under the EU Charter of Fundamental Rights or harm your commercial interests.

• **Data protection** — The submission of a proposal under this call involves the collection, use and processing of personal data. This data will be processed in accordance with the applicable legal framework. It will be processed solely for the purpose of evaluating your proposal, subsequent management of your grant and, if needed, programme monitoring, evaluation and communication. Details are explained in the Funding & Tenders Portal Privacy Statement.

#### Annex 1

#### Digital Europe types of action

The Digital Europe Programme will use the following actions to implement grants:

#### Simple Grants

**Description:** The Simple Grants are a flexible type of action used by a large variety of topics and can cover most activities. The consortium will mostly use personnel costs to implement action tasks, activities with third parties (subcontracting, financial support, purchase) are possible but should be limited.

#### Funding rate: 50%

**Payment model:** Prefinancing – (x) interim payment(s) – final payment

#### SME Support Actions

**Description:** Type of action primarily consisting of activities directly aiming to support SMEs involved in building up and the deployment of the digital capacities. This type of action can also be used if SMEs need to be in the consortium and make investments to access the digital capacities.

Funding rate: 50% except for SMEs where a rate of 75% applies;

**Payment model:** Prefinancing – (x) interim payment(s) – final payment

#### Coordination and Support Actions (CSAs)

**Description:** Small type of action (a typical amount of 1-2 Mio) with the primary goal to support EU policies. Activities can include coordination between different actors for accompanying measures such as standardisation, dissemination, awareness-raising and communication, networking, coordination or support services, policy dialogues and mutual learning exercises and studies, including design studies for new infrastructure and may also include complementary activities of strategic planning, networking and coordination between programmes in different countries.

#### Funding rate: 100%

**Payment model:** Prefinancing – (x) interim payment(s) – final payment

#### **Grants for Procurement**

**Description:** Type of action for which the main goal of the action and thus the majority of the costs consist of buying goods or services and/or subcontracting tasks. Contrary to the PAC Grants for Procurement *(see below)* there are no specific procurement rules (i.e. usual rules for purchase apply), nor is there a limit to 'contracting authorities/entities'. Personnel costs should be limited in this type of action; they are in general used to manage the grant, coordination between the beneficiaries, preparation of the procurements.

#### Funding rate: 50%

**Payment model:** Prefinancing - second prefinancing (to provide the necessary cashflow to finance the procurements) – payment of the balance

#### **PAC Grants for Procurement**

**Description:** Specific type of action for procurement in grant agreements by 'contracting authorities/entities' as defined in the EU Public Procurement Directives

(Directives 2014/24/EU, 2014/25/EU and 2009/81/EC) aiming at innovative digital goods and services (i.e. novel technologies on the way to commercialisation but not yet broadly available).

#### Funding rate: 50%

**Payment model:** Prefinancing - second prefinancing (to provide the necessary cashflow to finance the procurements) – payment of the balance

#### Grants for Financial Support

**Description:** Type of action with a particular focus on cascading grants. The majority of the grant will be distributed via financial support to third parties with special provisions in the grant agreement, maximum amounts to third parties, multiple pre-financing and reporting obligations.

Annex 5 of the model grant agreements foresees specific rules for this type of action regarding conflict of interest, the principles of transparency, non-discrimination and sound financial management as well as the selection procedure and criteria.

In order to assure the co-financing obligation in the programme, the support to third parties should only cover 50% of third party costs.

**Funding rate:** 100% for the consortium, co-financing of 50% by the supported third party

**Payment model:** Prefinancing - second prefinancing (to provide the necessary cash-flow to finance sub-grants) – payment of the balance

#### Framework Partnerships (FPAs) and Specific Grants (SGAs)

#### **FPAs**

**Description:** An FPA establishes a long-term cooperation mechanism between the granting authority and the beneficiaries of grants. The FPA specifies the common objectives (action plan) and the procedure for awarding specific grants. The specific grants are awarded via identified beneficiary actions (with or without competition).

#### **Funding rate:** no funding for FPA

#### SGAs

**Description:** The SGAs are linked to an FPA and implement the action plan (or part of it). They are awarded via an invitation to submit a proposal (identified beneficiary action). The coordinator of the FPA has to be the coordinator of each SGA signed under the FPA and will always take to role of single contact point for the granting authority. All the other partners of the FPA can participate in any SGA. There is no limit to the amount of SGAs signed under one FPA.

#### Funding rate: 50%

**Payment model:** Prefinancing – (x) interim payment(s) – final payment

#### Lump Sum Grants

**Description:** Lump Sum Grants reimburse a general lump sum for the entire project and the consortium as a whole. The lump sum is fixed ex-ante (at the latest at grant signature). The granting authority defines a methodology for calculating the amount of the lump sum. There is an overall amount, i.e. the lump sum will cover the beneficiaries' direct and indirect eligible costs. The beneficiaries do not need to report

actual costs, they just need to claim the lump sum once the work is done. If the action is not properly implemented only part of the lump sum will be paid.

#### Funding rate: 50%

**Payment model:** Prefinancing – second (third) prefinancing (as there is no cost reporting) – final payment

#### Annex 2

#### Eligibility restrictions under Articles 12(5) and (6) and 18(4) of the Digital Europe Regulation

#### Security restrictions Article 12(5) and (6)

If indicated in the Digital Europe Work Programme, and if justified for security reasons, topics can exclude the participation of legal entities *established* in a third country or associated country, or established in the EU territory but *controlled* by a third country or third country legal entities (including associated countries)<sup>45</sup>.

This restriction is applicable for SO1 (High Performance Computing), SO2 (Artificial Intelligence) and SO3 (Cybersecurity), but at different levels.

- In the case of SO3, the provision is implemented in the strictest way. When activated, only entities established in the EU and controlled from EU MS or EU legal entities will be able to participate — with no exceptions.
- In SO1 and SO2, entities controlled by third countries or third country legal entities may be able to participate if they comply with certain conditions set up in the Work Programme. To that end, additional rules will be imposed on those legal entities, which need to be followed if they want to participate.

The activation of this article will be make a number of specific provisions in the Grant Agreement applicable, such as country restrictions for eligible costs, country restrictions for subcontracting, and special rules for implementation, exploitation of results and transfers and exclusive licensing of results.

#### Strategic autonomy restrictions Article 18(4)

If indicated in the Digital Europe Work Programme, calls can limit the participation to entities *established* in the EU, and/or entities established in third countries associated to the programme for EU strategic autonomy reasons<sup>46</sup>.

The application of this article will make a number of specific provisions in the Grant Agreement applicable, such as country restrictions for eligible costs, country restrictions for subcontracting, and special rules for implementation, exploitation of results and transfers and exclusive licensing of results.

For more information, see <u>Guidance on participation in DEP, HE, EDF and CEF-DIG</u> <u>restricted calls</u>.

<sup>&</sup>lt;sup>45</sup> See Article 12(5) and (6) of the Digital Europe Regulation 2021/694

<sup>&</sup>lt;sup>46</sup> See Article 18(4) of the Digital Europe Regulation 2021/694.